Special Report Series, No. 64 (*revised*).

Priby Council

# MEDICAL RESEARCH COUNCIL

IMPERIAL BUREAU OF MYCOLOGY

# CATALOGUE OF THE NATIONAL COLLECTION OF TYPE CULTURES

MAINTAINED AT
THE LISTER INSTITUTE OF PREVENTIVE MEDICINE
CHELSEA GARDENS, LONDON, S.W.

Second Edition

LONDON
PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE
1925

*Price 2s. net*

Priby Council

# MEDICAL RESEARCH COUNCIL

---

## CATALOGUE OF THE NATIONAL COLLECTION OF TYPE CULTURES

MAINTAINED AT
THE LISTER INSTITUTE OF PREVENTIVE MEDICINE
CHELSEA GARDENS, LONDON, S.W.

Second Edition

LONDON
PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE
1925

## Medical Research Council.

The Earl of Balfour, K.G., O.M., F.R.S. (*Chairman*).

The Lord Mildmay of Flete, P.C. (*Treasurer*).

The Right Hon. William Graham, LL.B., M.P.

Sir Frederick W. Andrewes, D.M., F.R.S.

Professor E. P. Cathcart, C.B.E., M.D., D.Sc., F.R.S.

Professor G. Dreyer, C.B.E., M.D., F.R.S.

Professor T. R. Elliott, C.B.E., D.S.O., M.D., F.R.S.

Sir Archibald Garrod, K.C.M.G., D.M., F.R.S.

Sir Charles S. Sherrington, O.M., G.B.E., Sc.D., Pres. R.S.

Sir Cuthbert S. Wallace, K.C.M.G., C.B., F.R.C.S.

Sir Walter M. Fletcher, K.B.E., M.D., Sc.D., F.R.S. (*Secretary*).

## National Collection of Type Cultures.

*Director:* J. C. G. Ledingham, C.M.G., D.Sc., F.R.S.

*Curator:* R. St. John-Brooks, M.A., M.D., D.P.H.

*Assistant Curator:* Miss M. Rhodes.

Lister Institute of Preventive Medicine,
Chelsea Gardens, S.W.

# INTRODUCTION TO THE FIRST EDITION

THE Council have long had in view the formation of a National Collection of Type Cultures, from which biologists in general and bacteriologists in particular might obtain from a trustworthy source authentic strains of recognized bacteria and protozoa for use in scientific work. The need of an available supply of this kind has long been felt in many directions, and particularly in medical research work, both for the study of principles and methods in bacteriological investigations and for the systematic classification of bacteria and protozoa in their various species and strains. In the past the needs of workers in this respect have never been fully met. In this country the Lister Institute of Preventive Medicine has for many years assisted bacteriologists both at home and abroad, so far as the resources of its own private collection have permitted, but British workers have been dependent in great part upon the courtesy of scientific colleagues or upon the collections of Institutes in other countries. Before the war the collection at the Pasteur Institute in Paris, maintained by M. Binot, was very helpful to workers here. A collection of type cultures was formerly maintained on a commercial basis by Král at Prague, and this was subsequently transferred to the Serophysiological Institute of Vienna. This source of supply was never completely satisfactory, although many made use of it. In America the Museum of Natural History in New York has maintained a Culture Bureau during recent years, and it is believed that the activities of the Bureau have been of the greatest benefit to workers there, not only by the provision of authentic cultures, but also by the studies in classification made by its staff.

Early in 1920 the Council were able, by the courtesy of the Governing Body of the Lister Institute, to make arrangements to maintain a National Collection of Type Cultures at the Institute, where all the necessary facilities were provided. The scheme is under the general direction, on behalf of the Council, of Dr. J. C. G. Ledingham, F.R.S., a member of the staff of

(7323) Ps. 55281. Wt. 28805. 461/2005. 1000. 10/25. O.U.P.

the Lister Institute, while Dr. R. St. John-Brooks and Miss M. Rhodes have been appointed by the Council to be Curator and Assistant Curator of the Collection respectively. The Medical Research Council are greatly indebted to the Governing Body of the Lister Institute for this opportunity of establishing a central collection upon a proper footing without further delay. The present arrangement is made for a short term of years, before the end of which the future location of the Collection will be considered.

Attention has been concentrated primarily upon obtaining fully authenticated strains of pathogenic organisms, but as opportunity offers additions are also being made to the series of bacterial and protozoal strains of economic importance. Subsidiary researches are also being undertaken with a view to the discovery of economical and labour-saving methods of sub-culture. The staff of the Collection are also prepared to give help in the identification of strains received from workers at home or abroad.

It became apparent during last year that mycologists in this country felt the need of a similar collection. To some extent the Centraalbureau voor Schimmelcultures, Amsterdam (now at Baarn), has been found useful by British botanists, but it was the general opinion that a collection of fungi in this country was necessary for the co-ordination of research. As the formation of a collection of this kind was not at the time contemplated by any other institution, it was considered that the scope of the National Collection of Type Cultures should be extended in this respect. Working relations were accordingly established with the British Mycological Society, and a fully representative standing committee, of which the Curator of the National Collection is a member, has been appointed by the Society to consider and advise upon the ways in which the Collection may be made valuable to mycologists and to the study of fungi. It is proposed to collect and maintain cultures of fungi of importance in plant-pathology, medicine, veterinary science, technology, and soil biology, as well as types useful for teaching purposes and specially rare or interesting species. The mycological section of the Collection will for the present be restricted to about five hundred strains: annual lists will be published in the Transactions of the British Mycological Society, and a set of

type slides will be kept in the Botanical Department of the British Museum (Natural History) in addition to a working set in the Collection itself.

In presenting this first catalogue of strains maintained in the Collection the Council hope that workers in all spheres of microbiology will find it of value as a guide to the present resources of a collection on which they may make demands. It is also hoped that workers will in return assist the Collection by presenting new material for permanent maintenance. To the many who have already been donors the Council's grateful thanks are due, and it will continue to be the aim of the Council, and of the staff of the Collection, to maintain the fullest international reciprocity in this field.

In view of the present position of the problems involved in the classification of micro-organisms it has been thought more convenient, for the practical purposes of this Catalogue, to adopt an alphabetical rather than a taxonomic arrangement. The main list (Part I) is supplemented, however, by a subject index (Part II) giving cross-references under aetiological headings. As regards the nomenclature employed, it has been considered inadvisable to depart very widely from long-established usage: the need for international uniformity in this respect is nevertheless recognized, and it is hoped in future editions to take fuller cognizance of the labours of systematists in this and other countries.

15 Buckingham Street,
London, W.C. 2,
*28th January 1922.*

## INTRODUCTION TO THE SECOND EDITION

The great increase in the number and variety of cultures which have been added to the Collection since the first edition of this catalogue appeared in 1922 has called for a second edition. The Council take this opportunity of recording their thanks to all those workers at home and abroad, in all fields

of bacteriological endeavour, whose contributions of new organisms have enriched the National Collection.

The number of living strains now being maintained in cultivation much exceeds two thousand. Over four thousand cultures were distributed to workers throughout the world in 1924, and the Council feel confident that the Collection is supplying a real need.

The arrangement of items in Part I of the new catalogue remains as before on a strictly alphabetical basis. The classification of subjects in Part II has been much extended and amplified to facilitate reference. It has not been thought desirable to introduce any important changes here into the nomenclature of bacteria until the difficult and contentious questions involved have been submitted to international consideration and settlement. The Council, however, note with hearty appreciation the labours in this field of the Society of American Bacteriologists. While they must hold that no unanimity in bacterial nomenclature is likely to be reached except as the outcome of full international consideration, they would here pay tribute to the American Committee for their valuable and extensive bibliographic researches which must form the basis of any future revised scheme of nomenclature. Throughout the present catalogue will be found in square brackets some of the amendments in bacterial nomenclature which have been suggested by the American systematists.

For the fungi, the nomenclature used is that which has been adopted by the British Mycological Society, of which a special Committee interests itself in this department of the National Collection.

The Council in conclusion would express the hope that this new edition of the catalogue may still further stimulate microbiologists in this and other countries not only to avail themselves of the resources of the Collection but also by depositing important strains for maintenance and reference, to make their contribution to those ideals of international reciprocity in bacteriological science which the Council greatly desire to foster.

15 York Buildings,
Adelphi, W.C. 2,
*9th June 1925.*

## NOTE

The co-operation of bacteriologists is earnestly invited, and in return every effort will be made to supply the needs of applicants for cultures. Cultures that may be sent either for identification or for maintenance in the Collection should be accompanied by the fullest particulars as to source and date of isolation and, if possible, by clinical and epidemiological notes. It must naturally be left to the discretion of the Director to decide whether given cultures are of sufficient importance to be maintained in the Collection, but it is hoped that this will not deter workers from forwarding strains of even the commonest types of organism. These will have value in view of the necessity for maintaining an adequate representation of strains of recent origin. Studies in classification will also be aided if large series of authentic specimens of closely related species are made available for workers.

Cultures will be supplied on demand so far as possible to workers at home or abroad, and, as a rule, a small charge will be made to defray the cost of media and postage.

It is requested that all communications be addressed to THE CURATOR, NATIONAL COLLECTION OF TYPE CULTURES, LISTER INSTITUTE, CHELSEA GARDENS, LONDON, S.W. 1.

# CATALOGUE OF THE NATIONAL COLLECTION OF TYPE CULTURES

## PART I. ALPHABETICAL LIST OF THE ORGANISMS

### WITH DETAILS OF THE STRAINS WHICH ARE MAINTAINED

Each entry in the catalogue consists, first, of the specific name employed. This is followed in some cases by the specific name according to the nomenclature provisionally recommended by the Committee of the Society of American Bacteriologists on Characterization and Classification of Bacterial Types.[1] The American name is enclosed in square brackets.

Some or all of the following particulars are then given, in the order named:

1. Reference Number.
2. Other particulars of the Type, Group or Variety to which the strain belongs.
3. Name of the person or institution from whom the strain was received either directly or through some intermediate agency.
4. Name, number or letter by which the strain has been previously known. *In order to avoid confusion this is printed in italic type.*
5. Particulars of the source from which the strain was isolated. The name of the isolator, when available, and the date of isolation.
6. Other information considered likely to be useful.
7. Date on which the strain was deposited in the National Collection. This is printed at the end of the last line of each entry.

***Absidia coerulea*** Bainier

1790. G. W. Martin, University of Iowa, U.S.A. 1924

***Absidia cylindrospora*** Hagem

1453. *21.* Isolated from soil, Rothamsted Experimental Station, 1919. 1922

***Acanthorynchus vaccinii*** Shear

1312. *No. 55.* Isolated by Dr. C. L. Shear, Washington, D.C., from cranberry. 1922

***Acetobacter xylinum.*** See *B. xylinum.*

***Achorion schoenleinii*** Leb.

789. Dr. Laidlaw, Guy's Hospital. Lesion of scalp in case of favus, 1920. 1920

[1] See BERGEY, *Manual of Determinative Bacteriology*, Baltimore, 1923. BUCHANAN, *General Systematic Bacteriology*, Baltimore, 1925.

***Acladium castellani*** Pinoy
706. Prof. Castellani. Isolated 1915. 1920
(Castellani and Chalmers, *Manual of Tropical Medicine*, 3rd Ed., 1919, pp. 1112 and 2089.)

***Acrospeira mirabilis*** B. & Br.
1491. *Leeds.* Isolated by F. A. Mason, from Spanish chestnut, Leeds Market. 1922

***Acrostalagmus cinnabarinus*** Corda
1132. F. T. Brooks, Botany School, Cambridge. *Potato.* From potato tuber, 1920. 1921
2 other strains.

***Actinomyces bovis*** (anaerobic type, Wolff and Israel, 1891)
1897. Dr. P. Fildes, London Hosp. Sinus in neck, Oct. 1924. 1924
Another strain (No. 2009).

***Actinomyces caprae*** Silb.
659. Lister Inst. *Lister.* 1920

***Actinomyces scabies*** (Thaxter) Güssow.
1356. Dr. E. J. Butler, Imp. Bureau of Mycology, Kew. From potato. 1922

***Actinomyces*** (*Aerobic types from Man*)
600. *Horton.* Isolated by Capt. St. John Brooks, R.A.M.C., from pus containing typical actinomycotic granules from parotid abscess, Horton War Hosp., Epsom, 1919. 1920
434. Lister Inst. *Human.* 1920
See also *Nocardia*.

*The following strains of* ***Actinomyces*** *are from soil: for details see Soil Science*, 1919, **8**, 71 and 1916, **1**, 99.

***Actinomyces albosporeus*** Kr. (Waks. & Curt.)
1578. S. A. Waksman, New Jersey Agric. Experiment Station. 1923

***Actinomyces aureus*** Waks. & Curt.
1574. S. A. Waksman. 1923

***Actinomyces californicus*** Waks. & Curt.
1561. S. A. Waksman. 1923

***Actinomyces chromogenus*** Gasp.
1569. S. A. Waksman. 1923

***Actinomyces fradii*** Waks. & Curt.
1564. S. A. Waksman. 1923

***Actinomyces griseus*** Kr. (Waks. & Curt.)
1583. S. A. Waksman. 1923

***Actinomyces lipmanii*** Waks. & Curt.
1585. S. A. Waksman. 1923

***Actinomyces pheochromogenus*** Conn
1566. S. A. Waksman. 1923

***Actinomyces reticuli*** Waks. and Curt.
1565. S. A. Waksman. 1923

***Actinomyces reticulus-ruber*** Waks.
1555. S. A. Waksman. 1923

***Actinomyces rutgersensis*** Waks. & Curt.
1562. S. A. Waksman. 1923

***Actinomyces*** 104 Waks.
1582. S. A. Waksman. 1923

***Actinomyces*** 128 Waks.
1584. S. A. Waksman. 1923

***Actinomyces*** 145 Waks.
1586. S. A. Waksman. 1923

***Actinomyces*** 168 Waks.
1581. S. A. Waksman. 1923

***Actinomyces*** 206 Waks.
1560. S. A. Waksman. 1923

***Actinomyces*** 218 Waks.
1571. S. A. Waksman. 1923

***Allescheria gayonii*** Sacc. & Syd.
See *Eurotiopsis gayonii* Cost.

***Alternaria grossularieae*** Jacz.
1762. Dr. Horne, Imp. Coll. of Science. From apples. (*Ann. Applied Biol.* 1920, **7**, 183.) 1924

***Alternaria sp.***
1007. *Ireland.* Isolated by Miss Lorrain Smith from rotting tent canvas from Ireland. 1921

***Amylomyces rouxii.*** See *Mucor rouxii*

***Amylomyces tapioca***
605. A. Jörgensen's Lab., Copenhagen. *Thaysen.* 1920

***Anthostomella destruens*** Shear
1314. *No. 67.* Isolated by Dr. C. L. Shear, Washington, D.C., from cranberry. 1924

***Aplanobacter michiganense.*** See *B. michiganense*

***Aplanobacter stewarti.*** See *B. stewarti*

***Ascodesmus nigricans*** v. Tiegh. See *Bouderia clausenii*

***Aspergillus amstelodami*** Manj.
1945. Miss M. B. Church, Washington, D.C. *126.* Represents a form of the *Aspergillus repens* group. 1925

***Aspergillus candidus*** Link
595. Centralstelle, Amsterdam. *Washington 106.* 1920

***Aspergillus carbonarius*** (Bainier) Thom
1325. Thom and Church, Washington, D.C., U.S.A. *4030. 1.* 1922

***Aspergillus clavatus*** Desm.
978. Thom and Church, Washington, D.C., U.S.A. *Washington 107.* Type culture. 1921

***Aspergillus effusus*** Tiraboschi
973. Dr. F. B. Lutman, Vermont, U.S.A. *Washington 130.* (*Am. J. Botany*, 1921, **2**, 103.) 1921

***Aspergillus flavescens*** Wred. See *Aspergillus flavus* Bref.

***Aspergillus flavus*** Brefeld
596. Centralstelle, Amsterdam. *Washington 108.* 1920

***Aspergillus fumaricus*** Wehm.
1693. Carl Neuberg. *4668. 2.* 1923

***Aspergillus fumigatus*** Fres.
367. Capt. S. R. Douglas, St. Mary's Hosp. *Zoo.* White egret at Zoological Gardens, London, suffering from aspergillosis, 1916. 1920
982. Thom and Church. *Washington 118.* Type culture. 1921
1326. Thom and Church. *4138. H. 52.* Isolated by S. A. Waksman from cranberry soil, New Jersey. Ascosporic. 1922
7 other strains isolated from penguins, pigeons, black swans, golden eagles, water hens, flamingoes, and owls, by Dr. Nathl. Lucas, Zoological Society's Gardens.

***Aspergillus glaucus*** Link
1216. Birkbeck College, London. 1922

***Aspergillus* (*Eurotium*) *herbariorum*.** See *Aspergillus glaucus*

***Aspergillus luchuensis*** T. Inui
1017. Thom and Church. *4291. 3.* Isolated by Dr. Hanzawa, Imp. University of Tokyo. 1921

***Aspergillus nidulans*** Eidam
795. *Underground 134.* Isolated by Dr. Graham Forbes, L.C.C., from dust of Tube Railway. 1921
2 other strains (Nos. 793 and 796).

***Aspergillus niger*** v. Tieghem
594. Centraalbureau voor Schimmelcultures, Baarn. *Washington 111.* Type culture. 1920
6 other strains.

***Aspergillus niger-citricus*** Wehm.
1692. Carl Neuberg, Berlin. *4668. 4.* 1923

***Aspergillus ochraceus*** Wilh.
979. Thom and Church. *Washington 4065. 1.* 1921

***Aspergillus oryzae*** (Ahlberg) Cohn
598. Centralstelle, Amsterdam. *Washington 113.* 1920
One other strain (No. 965).

***Aspergillus parasiticus*** Speare
975. Thom and Church. *Mealy bug.* Isolated by Speare in Honolulu, 1912 or earlier. Parasitic upon the mealy bug of sugar-cane (*Pseudococcus calceolariae* Mask). (*Am. J. Botany*, 1921, **2**, 103.) 1921

***Aspergillus pulverulentus*** Thom
1324. Thom and Church. *2580.* Interior of red peppers, Barcelona, Spain. 1922

***Aspergillus sydowi*** Bain. & Sart.
980. Thom and Church. *Washington 3521.* 1921
1944. Thom and Church. *Kop. 22.* Isolated from sugar products in Louisiana by Dr. N. Kopeloff. 1925

***Aspergillus tamari*** Kita
599. Thom and Church. *Washington 4235 x. l.* Soy products used in making salt pickles, China. 1920
One other strain (No. 1884).

***Aspergillus terreus*** Thom

981. Thom and Church. *Washington 144.* 1921

***Aspergillus terricola*** March. var. ***americana*** March.

974. Thom and Church. *Washington.* Isolated by Scales from redland soil in Georgia, 1914 or earlier. (*J. Biol. Chem.*, 1914, **19**, 459.) 1921

***Aspergillus versicola*** Vuill.

1883. H. R. Jones, Dept. of Botany, Bristol University. 1924

***Aspergillus wentii*** Wehm.

597. Centralstelle, Amsterdam. *Washington 116.* 1920

***Azotobacter chroococcum*** Beij.

1855. Rothamsted Experimental Station. *Christensen.* Isolated from single cell by Harald Christensen. 1924

3 other strains.

***B. abortivo-equinus*** [*Salmonella abortivo-equina*]

626. Royal Vet. Coll., London. *Foal 3.* Heart blood of aborted foal, 1917. 1920

451. Prof. Murray, Iowa State Medical College. *709.* (*J. Infect. Dis.*, 1919, **25**, 341.) 1920

766. Prof. Denys, Louvain. *Avortement cheval.* (*Compt. rend. Soc. de biol.*, 1919, **82**, 954.) 1920

866. *4.* Isolated by Dr. K. F. Meyer from vagina of mare, 1913. 1921

***B. abortus*** Bang. [*Alcaligenes abortus*]

624. *English strain 8.* Isolated by Capt. Edwards, R.A.V.C., Royal Vet. Coll., London, from stomach of foetal calf, 1919. 1920

900. Dr. K. F. Meyer. *Hog.* Isolated by Dr. Taum from liver of aborted hog foetus, 1920. 1921

7 other strains from various sources.

***B. aceti*** Hansen. [*Acetobacter aceti*]

612. A. Jörgensen, Copenhagen. *Thaysen.* Vinegar, 1920

Another strain (No. 1345).

***B. acetoethylicum*** Northrop.

1068. American Museum of Natural History. *234. A.* Isolated by J. H. Northrop, Rockefeller Inst., New York. (*J. Biol. Chem.*, 1919, **39**, 1.) 1921

***B. acidi lactici*** Grotenfelt, Hueppe [*Escherichia acidi-lactici*]

413. American Museum of Natural History, type strain. *131.* Faeces. (*J. Bact.*, 1919, **4**, 429.) 1920

3 other strains.

***B. acidophilus*** Moro. [*Lactobacillus acidophilus*]

1724. Dr. Leo F. Rettger. *10. 2.* Faeces of rats, 1923. 1923

2 other strains (Nos. 1723 and 1899).

(*J. Bact.* 1917, **2**, 47.)

***B. acidophilus odontolyticus*** McIntosh, James and Lazarus-Barlow.

1406. *Type 1.*

1407. *Type 2.* Isolated by Professor McIntosh, Middlesex Hospital, from dental caries, 1922. 1922

(*Brit. J. Exper. Path.* 1922, **3**, 138.)

***B. acnes*** Gilchrist [*Corynebacterium acnes*]
737. *Ponsonby.* Isolated by Dr. A. F. Hayden, St. Mary's Hosp., from severe case of facial acne. 1920
3 other strains.

***B. aerofetidus*** Weinberg and Séguin [*Clostridium aerofetidum*]
505. Prof. McIntosh. *208.* 1920
(*Compt. rend. Soc. de biol.*, 1916, **79**, 116.)

***B. aerogenes pfeifferi.*** See *B. lactis aerogenes*

***B. aertrycke.*** See *B. suipestifer*

***B. alkalescens*** Andrewes
1601. Sir Frederick Andrewes. *Towne.* (*Lancet*, 1918, i, 560.) 1923

***B. amylovorus*** (Burrill) Trevisan [*Erwinia amylovora*]
1959. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. Cause of fire-blight of apple, pear, quince, &c. (See *Bacterial Diseases of Plants*, Smith, 1920.) 1924
Another strain.

***B. anatum*** Rettger and Scoville. (*Salmonella*, serological type Aertrycke)
851. Prof. Rettger, Yale University. *Ovum W.* Ovary of duck during epizootic of 'keel' in Massachusetts, U.S.A. (*J. Infect. Dis.*, 1920, **26**, 217.) 1921

***B. angulatum***
1961. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. Cause of angular spot in tobacco in U.S.A. and South Africa. 1924

***B. anthracis***
108. Lister Inst. *Paddington V.* Shaving brushes, 1919. 1920
631. Royal Vet. Coll., London. *17 James.* Ear vein of cow, 1912. Avirulent. 1920
1711. Pasteur Inst., Paris. *1er Vaccin Charbonneux.* Pasteur's strain. 1923
1712. Pasteur Inst. *2e Vaccin Charbonneux.* Pasteur's strain. 1923
7 other strains.
See also *Anthracoid bacillus.*

***B. aptatum*** Brown and Jamieson [*Phytomonas aptata*]
1977. Dr. Erwin F. Smith. Causes disease of sugar beet and nasturtium leaves. Also lettuce blight. (*J. Agric. Research*, 1913, **1**, 189.) 1924

***B. aroideae*** Townsend [*Erwinia aroidea*]
1987. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. 'Soft rot' in calla lily, 1912. (*Bull. 60, Bureau of Plant Industry. Dept. of Agric., Washington, D.C.*) 1924

***B. asiaticus mobilis*** Cast.
1747. Prof. Aldo Castellani. 1924
1881. Isolated from faeces by Dr. H. Schütze, 1924. 1924

***B. atrofaciens*** McCullough. [*Phytomonas atrofaciens*]
1986. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. Causes 'glumerot' of wheat (*Triticum vulgare* L.). (*J. Agric. Research*, 1920, **18**, 543.) 1924

***B. avisepticus*** [*Pasteurella avicida*]
121. Pasteur Inst. *II.* From fowl cholera. 1920
One other strain (No. 1874).

***B. barkeri***

393. Dr. S. G. Paine. *Barker.* Isolated by Prof. Barker from infection with Barker's pear blossom blight. (*Ann. Applied Biol.*, 1918, **5**, 62.) 1920

***B. beticolum*** Smith, Brown and Townsend

1982. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. Causes tubercle of sugar beet. (*Bact. beticolum. Bureau of Plant Industry. U.S. Dept. of Agric.*, 1911, 94.) 1924

***B. bifermentans*** Tissier and Martelly [*Clostridium bifermentans*]

506. Miss M. Robertson. *F. I.* (*Ann. de l'Inst. Pasteur*, 1902, **16**, 865.) 1920

2 other strains (Nos. 536 and 1340).

***B. botulinus*** van Ermengen [*Clostridium botulinum*]

94. Inst. of Infectious Diseases, Berlin, through Prof. Madsen, Copenhagen. *A.* 1920

95. Inst. of Infectious Diseases, Berlin, through Prof. Madsen, Copenhagen. *B.* 1920

2012. Dr. P. Bruce White and Dr. W. M. Scott. *Lough Maree.* Food poisoning outbreak at Lough Maree, Scotland, 1922. (See *Report* by Dr. G. R. Leighton to Scottish Board of Health, 1923.) 1925

***B. bovisepticus*** [*Pasteurella bovisepticа*]

929. Dr. Houghton, Parke Davis Co., Detroit, U.S.A. *01448.* Used in preparation of sera in bovine haemorrhagic septicaemia. 1921

*Jones' Groups*
*Dr. F. S. Jones, Rockefeller Inst., Princeton, N.J., U.S.A.*
(*J. Exper. M.*, 1921, **34**, 561)

1285. Group I. *Cow 530.* Diffuse pneumonia, cow, New Jersey, 1920. 1924

1286. Group II. *Calf 432 a.* Diffuse pneumonia, cow, New Jersey, 1920. 1924

1287. Group III. *Bov. Pn. I.* Necrotic pneumonia, calf, Mass., about 1913. 1924

***B. bronchisepticus*** Ferry [*Alcaligenes bronchisepticus*]

452. *Dog 71.* Isolated by Dr. Ferry, Parke Davis Co., Detroit, U.S.A., from lungs of dog with distemper. (*Vet. J.*, 1912, **68**, 445.) 1920

6 other strains (Nos. 453–458) from guinea-pigs, rabbits, ferrets, monkeys, white rats and Man.

***B. bulgaricus*** Grigoroff [*Lactobacillus bulgaricus*]

76 B. *Massol.* One of Metchnikoff's original strains, supplied by him to Prof. Eyre, Guy's Hosp., 1909. 1920

***Bacillus (acid-fast) from butter***

524. (Butter bacillus of Rabinowitsch.) National Biological Museum. *New York.* 1920

*Strains of acid-fast bacilli isolated by Dr. F. Griffith from guinea-pigs inoculated with butter samples in 1912.* (*Rep. Local Gov. Bd.* (*Suppl. of Med. Officer*), 1912–13, **42**, 299)

337. *G.P. 330.* 1920

333. *G.P. 60.* 1920

334. *G.P. 61.* 1920

***B. butylicus*** Weizm.

619. Dr. A. Thaysen, Holton Heath, Dorset. *Thaysen.* Used during the War in the manufacture of acetone and n. butyl alcohol (Weizmann, 1915). 1920

***B. butyricus*** Hueppe

1650. Král, Vienna. *Hueppe.* Hueppe's original strain. (*Mitt. a. d. k. Gsndhtsamte*, 1884, **2**, 309.) 1923

***B. campestre*** Pammel [*Phytomonas campestre*]

1958. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. 1924

388. *Paine.* Isolated by Dr. S. G. Paine, Imperial Coll. of Science, S. Kensington, from a cauliflower infected with black rot, 1918. (*Ann. Applied Biol.*, 1918, **5**, 62.) 1920

***B. canariense*** Migula [*Eberthella pfaffi*]

*Strains received from Král's Laboratorium*, 1921

1101. *B. der Kanarienvogelcholerae Postollea.*

1102. *B. der Kanarienvogelseuche Pfaff* (*Cent. f. Bakt., Orig.*, 1905, **38**, 275).

1103. *B. der Kanarienvogelnekrose II.* Schnürer.

1104. *B. der Kanarienvogelnekrose III.* Schnürer.

1105. *B. der Septicaemiae haemorrhagiae* Truthahn. Magnusson.

(For notes upon these and other strains, see St. John-Brooks and Rhodes, *J. Path. and Bact.*, 1923, **26**, 433).

***B. cannae*** Bryan [*Phytomonas cannae*]

1956. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. Causes 'bud rot' in cannas. *Canna indica* L. (*J. Agric. Research*, 1921, **21**, 143). 1924

***B. carotovorus*** Jones [*Erwinia carotovora*]

1975. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. *Wis. 3a. Jones.* (*Bacterial Diseases of Plants*, E. F. Smith, 1920.) 1924

1996. Isolated from turnip at East Malling by Dr. H. Wormald. Cause of 'soft rot' of carrot, &c. 1924

2 other strains.

***B. caryocyaneus***

1381. Dr. A. J. Kluyver, Technical High School, Delft, Holland. *Delft I.* 1922

***B. caviae*** (*Salmonella* ? Type)

428. Dr. Krumwiede, New York. *146.* Isolated by Dr. Ferry from guinea-pig epizootic, Detroit, U.S.A. 1920

***B. chauvoei*** Arloing, Cornevin and Thomas [*Clostridium chauvei*]

287. Miss M. Robertson. *203.* Isolated by Prof. McIntosh. Cattle suffering from Rauschbrand. 1920

One other strain (No. 502).

***B. cloacae*** Jordan [*Aerobacter cloacae*]

408. American Museum of Natural History, type strain. *23.* Isolated by Jordan from Chicago canal drainage, 1899. (*J. Bact.*, 1919, **4**, 429.) 1920

257. Lister Inst. 1920

***B. cochlearius*** Douglas, Fleming and Colebrook [*Clostridium cochlearium*]

535. *T.M.I.H.C.* Isolated by Miss M. Robertson from tetanus stock laboratory culture. 1920

***B. coli anaerogenes*** [*Escherichia coli*]

1077. *26So.* Isolated by Dr. David Nabarro, Children's Hospital, Gt. Ormond St., London, 1921. 1923

1031. Isolated at Lister Inst. from urine in case of cystitis, 1924. 1925

***B. coli communis*** Esch. [*Escherichia coli*]

86. Lister Inst. *Escherich.* Original Escherich strain. 1920

692. Sir Alexander Houston. *Houston 2.* 1920

4 other strains.

1099. Mucoid. *Ellis.* Isolated from urine by Dr. Ellis, London Hospital. 1921

1100. *Gratia.* Gratia's bacteriophage strain. 1921

*Strains received from Dr. L. S. Dudgeon, St. Thomas's Hospital, London* (*J. Hyg.*, 1921, **20**, 137)

1092. Non-haemolytic. *4657.* From urine. 1921

1091. Haemolytic. *X6.* From faeces. 1921

1094. Haemolytic. *Dow.* From urine. 1921

3 other strains.

***B. coli mutabile*** Massini

1419. *Urine.* Isolated from urine by Dr. Laidlaw, National Inst. for Medical Research, Hampstead. 1922. 1922

***Bacillus (coliform)***

The following organisms have been grouped by Dr. Lepper in accordance with MacConkey's scheme (*J. Path. and Bact.*, 1921, **24**, 192):

844. Group I. *Reeves.* Urine in acute cystitis, 1920. 1921

845. Group I. *A. F.* Urine in chronic cystitis, 1920. 1921

846. Group II. *Shaw.* Urine in acute cystitis, 1920. 1921

848. Group III. *Sherry.* Urine in acute cystitis, 1918. 1921

1715. Group IV. *Piper.* Urine in cystitis. 1923

For other coliform bacilli *see* under special names.

***B. columbensis*** Castellani [*Salmonella columbensis*]

1748. Prof. Castellani. *Castellani.* Isolated 1905. 1924

(*Centralbl. f. Bakt.* (&c.), 1914, Orig., **74**, 197; Castellani and Chalmers, *Manual of Tropical Medicine*, 3rd Ed., 1919, pp. 946 and 1410.)

***B. communior*** Durham [*Escherichia communior*]

419. American Museum of Natural History, type strain. *137.* (*J. Bact.*, 1919, **4**, 429), 1911. 1920

***B. corallinus*** Heff. [*Serratia corallina*]

1052. Kral, Vienna. *Heffernan.* Isolated by Heffernan. (*Centralbl. f. Bakt. II*, 1904, **11**, 459.) 1923

***B. coronafaciens*** Elliott [*Phytomonas coronafaciens*]

1971. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. Associated with 'halo-blight' of oats. (*J. Agric. Research*, 1920, **19**, 139.) 1924

***B. cuniculisepticus*** [*Pasteurella cuniculicida*]

1550. Isolated from Belgian hares during epizootic 1922. 1923

One other strain received as *B. lepisepticum* (No. 1876).

***B. delphinii*** E. F. Smith

1955. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. Associated with larkspur blight. (*Bacterial Diseases of Plants*, E. F. Smith, 1920.) 1924

Another strain.

***B. dendroides*** Holzmüller

927. H. G. Thornton. *Rothamsted.* Soil, Rothamsted Experimental Station, Harpenden, Herts. 1921

1653. Král, Vienna. *Holzmüller.* Original strain. Isolated by Holzmüller, Heidelberg. 1923

***B. denitrificans*** Burri and Stutz

1656. Král, Vienna. *Kornauth.* Isolated by Kornauth, Vienna, from garden soil. 1923

***B. denitrofluorescens liquefaciens***

1385. Dr. A. J. Kluyver, Technical High School, Delft, Holland. *289.* 1922

***B. diphtheriae.*** See *Corynebacterium diphtheriae*

***B. 'dispar'*** Andrewes [*Eberthella dispar*]

1602. Sir Frederick Andrewes. Isolated by J. C. G. Ledingham in Iraq. (*Lancet*, 1918, i, 560.) 1923

***B. dysenteriae*** Flexner [*Eberthella paradysenteriae*]

*Strains received from Sir F. W. Andrewes (M.R.C. Special Report Series, No. 42, 1919).*

1. Type W. *Cable.* Isolated by Broughton-Alcock from reputed first case of dysentery, British Front, Flanders, 1914. 1920

2. Type X. *Hughes.* Carrier, University War Hospital, Southampton. 1920

3. Type V. *Oxford Flexner.* Strain used in Standards Laboratory, Oxford. 1920

727. Type V. Prof. Lentz, Berlin. *Lentz-Flexner.* 1920

4. Type WX. *Mountain 2,464.* Carrier, University War Hospital, Southampton. 1920

5*a*. Type VZ. *Mason.* 1923

6. Type Y. American Museum of Natural History, type strain *Original Hiss and Russell*, from General Russell himself. 1920

7. Type Z. *Whittington.* Carrier, University War Hospital, Southampton. 1920

13 other strains, various types and sub-types.

***B. dysenteriae*** Schmitz. *See B. schmitz*

***B. dysenteriae*** Shiga [*Eberthella dysenteriae*]

152. *Wynne.* Isolated by Dr. Ledingham, King George Hosp. Case from Gallipoli, 1915. 1920

187. *Parker.* Isolated by Lt.-Col. Martin at Lemnos, 1916. 1920

5 other strains.

752. *550 'Rough'* } Isolated in Italy by Dr. Walter Gilmour, 1918.
753. *550 'Smooth'* } Examined by Dr. Arkwright. (*J. Path. and Bact.*, 1921, **24**, 36.) 1920

4 other strains.

***B. dysenteriae*** Sonne type III (Thjøtta III).

268. Thjøtta, Christiania. *20.* Child with dysentery. (*J. Bact.*, 1919, **4**, 355.) 1920

One other strain (No. 269).

***B. enteritidis*** Gärtner [*Salmonella enteritidis*]

75. Pasteur Inst. *Bainbridge.* Isolated 1908, unknown source. (*J. Path. and Bact.*, 1909, **13**, 443.) 1920
410. Rockefeller Inst. *18.* Type strain of American Museum of Natural History. (*J. Bact.*, 1919, **4**, 429.) 1920
125. *Limerick.* Isolated by Prof. McWeeney from food-poisoning outbreak in Limerick, 1910. 1920
128. *McNee.* Isolated by Dr. McNee from blood and broncho-pneumonic lesions of patient who died with symptoms of acute toxaemia, 1917. 1920
127. *Stokes.* Case of fatal enteritis, France, 1917. 1920
126. *Newcastle.* Isolated by Prof. Hutchens from milk that caused food-poisoning, 1910. 1920
618. Messrs. Evans, Lescher, Son & Webb, Liverpool. *Rat Virus B* (*Liverpool Virus*). 1920
617. Ratin Laboratory, London. *Rat Virus A* (*Ratin*). 1920
205. Lister Inst. *Danysz* 1920
810. *Rat.* Spontaneous infection in rat (multiple pulmonary abscesses), Lister Inst., 1920. 1921

5 other strains.

See also *B. paracoli.*

***B. erysipelatis suis*** [*Erysipelothrix rhusiopathiae*]

1224. Capt. W. G. Wragg, Ministry of Agriculture, Veterinary Laboratory, New Haw. Intestine of pig. 1922

***B. faecalis alcaligenes*** Petruschky [*Alcaligenes fecalis*]

415. American Museum of Natural History, type strain. *439.* Faeces. (*J. Bact.*, 1919, **4**, 429.) 1920

5 other strains.

***B. fallax*** Weinberg and Séguin [*Clostridium fallax*]

508. Miss M. Robertson. *Morcom.* Blood culture from fatal case of gas gangrene. (*Compt. rend. Soc. de biol.*, 1915, **78**, 686.) 1920

2 other strains.

***B. fluorescens liquefaciens*** Flügge [*Pseudomonas fluorescens*]

964. A. Chaston Chapman, F.R.S. 1921

***B. fluorescens non liquefaciens*** Lehmann and Neumann [*Pseudomonas non liquifaciens*]

912. *Urine.* Isolated by Dr. H. Schütze, Lister Inst., from urine, 1921. 1921

***B. fulvum*** Zimm. [*Flavobacterium fulvum*]

1174. *Water.* Isolated from water sample at Lister Inst., London, 1921. Determined by Curator, N.C.T.C. 1921

***B. gallinarum*** Klein

416. American Museum of Natural History. *43.* (*J. Bact.*, 1919, **4**, 429.) 1920
398. Prof. Theobald Smith. *Harvard* (Recd. as *B. sanguinarium* Moore) 1914. 1920
1108. Král, Vienna. Isolated from pheasant epizootic by Klein (Recd. as *B. phasianicida* Klein). 1921
1500. Agric. Expt. Stn., Rhode Is., U.S.A. *16.* Spleen of fowl. (Recd. as *B. jeffersoni* Hadley). (See notes on above by St. John-Brooks and Rhodes, *J. Path. and Bact.*, 1923, **26**, 433.) 1922

2 other strains.

***B. glässer.*** See *B. typhi suis*

***B. gummisudans*** L. McCullough
1965. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. Isolated from leaf of *Gladiolus* (var. Schwaben), 1923. 1924

***B. güntheri*** Lehmann and Neumann [*Streptococcus lactis*]
661. Dr. A. Thaysen, Holton Heath, Dorset. *Thaysen.* St. Ivel cheese. 1920

***B. haemoglobinophilus canis*** Friedberger [*Hemophilus canis*]
1659. Dr. P. Fildes, London Hospital. *XIII.* Isolated by Dr. Martin Kristensen, Copenhagen. (*Monograph by Dr. Kristensen.*) 1923

***B. histolyticus*** Weinberg and Séguin [*Clostridium histolyticum*]
503. Miss M. Robertson. *Weinberg.* Isolated by Weinberg from case of gas gangrene. (*Compt. rend. Acad. d. sc.*, 1916, **163**, 449.) 1920

***B. hyacinthi*** Wakker
387. *Paine.* Isolated by Dr. S. G. Paine from a hyacinth bulb infected with Wakker's disease, 1915. (*Ann. Applied Biol.*, 1918, **5**, 62.) 1920

***B. influenzae*** Pfeiffer [*Hemophilus influenzae*]
293. R.A.M. Coll., Millbank. *Smellie.* Sputum of influenza patient, 1919. 1920
7 other strains.

***B. jeffersoni*** Hadley [*Eberthella jeffersonii*]. See *B. gallinarum* Klein

***B. johne*** [*Mycobacterium paratuberculosis*]
2008. Isolated at Coll. of Agricult., Madison, Wisconsin, U.S.A., by Prof. E. F. Hastings, 1915 from case of Johne's disease in a bovine. 1925

***B. kützingianum*** Hansen [*Acetobacter kützingianus*]
614. A. Jörgensen, Copenhagen. *Thaysen.* Vinegar. 1920

***B. lachrymans*** Smith and Bryan [*Phytomonas lachrymans*]
1957. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. Causes 'angular leaf spot' of cucumber. (*J. Agric. Research*, 1915, **5**, 465.) 1924

***B. lactis aerogenes*** Escherich [*Aerobacter aerogenes*]
418. American Museum of Natural History, type strain. *240.* Probably descended from Pfeiffer's original Capsule Bacillus. (*J. Bact.*, 1919, **4**, 429.) 1920
2 other strains (Nos. 124 and 243).
See *Leather Bacillus*

***B. lathyri*** Manns and Tauberhaus
389. Isolated by Dr. S. G. Paine, Imp. Coll. of Science, S. Kensington, from tomatoes, 1919. Causes stripe disease of tomatoes. (*Ann. Applied Biol.*, 1919, **6**, 183.) 1920

***B. lepisepticus***
1876. Dr. Houghton, Parke Davis Co., Detroit, U.S.A. *01316.* 1924
See *B. cuniculisepticus.*

***Bacilli associated with leprous lesions***

*Strains received from Prof. Duval, New Orleans, U.S.A.*

509. 'Kedrowsky.' Kraus, Vienna. *Kraus.* 1920
510. 'Rost and Williams.' 1920
511. 'Nabarro-Bayon.' 1920
512. 'Clegg I.' Recovered from leprous lesions by Clegg. 1920
513. 'Clegg II.' „ „ „ „ „ „ 1920
514. 'Duval's Chrome.' „ „ „ „ „ Duval. 1920
515. 'Levy Chrome.' Kraus, Vienna. *Kraus.* 1920
516. 'Brinckerhoff I.' Recovered by Brinckerhoff from leprous lesions. 1920
517. 'Brinckerhoff II.' „ „ „ „ „ 1920
518. '18.' 1920
519. 'Barry.' 1920
520. 'Reinsteiner.' 1920
521. 'Currie.' 1920
522. 'Elly.' 1920

(For notes upon these strains, see Kondo, *Ztschr. f. Hyg. u. Infektionskrankh.*, 1925, **104**, 714.)

***B.ma llei*** Löffler and Schütz [*Pfeifferella mallei*]

625. Royal Veterinary College. *Minett.* Lung of horse, 1918. 1920
3 other strains (Nos. 120, 1466, and 1734).

***B. malvacearum*** E. F. Smith [*Phytomonas malvacera*]

1960. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. Causes 'angular leaf spot' of cotton plants. (*Bacterial Diseases of Plants*, E. F. Smith, 1920.) 1924
Another strain.

***B. marginale*** N. A. Brown [*Phytomonas marginale*]

1981. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. A cause of bacterial soft rot in lettuce. (*J. Agric. Research*, 1918, **13**, 367.) 1924
Another strain.

***B. megatherium*** De Bary

654. Lister Inst. *Lister.* 1920
One other strain (No. 1379).

***B. melitensis*** Bruce [*Alcaligenes melitensis*]

80. *Arkwright.* Isolated by Dr. Arkwright from blood of Malta fever patient, Malta, 1915–16. 1920
311. *Zammit I.* Isolated by Dr. Zammit, Malta, from milk of goat suffering from undulant fever. 1920

*Feusier and Meyer's Types* (*J. Infect. Dis.*, 1920, **27**, 185)

893. Group I. R.A.M. Coll., Millbank. *20*, originally *Austria I.* 1921
892. Group II. Race Monaco. Inst. Pasteur d'Algérie. *8.* 1921
894. Group II. Dr. Eyre, Guy's Hosp. *27*, originally *Goat.* Goat's milk, Malta. 1921
891. Group III. Inst. Pasteur d'Algérie. *7*, originally *R. Mun. 5.* 1921
6 other strains.

***B. mesentericus*** (Flügge) Migula.

656. Lister Inst. *Lister.* 1920

***B. mesentericus*** (Flügge) Migula. (*continued*)
*Miss Jordan Lloyd's Types isolated in 1917 from Ropy Bread*
(see *J. Hyg.*, 1921, **19**, 380)

1023. Type A. 1921
1024. Type B. *B. I.*
1025. Type C. *C. II.*
1026. Type D. *D. II.*
1027. Type E. *E. II.*
5 other strains.

***B. mesentericus panis viscosi*** Vogel [*Bacillus panis*]
962. A. Chaston Chapman, F.R.S. *Chapman.* Ropy bread. 1921

***B. mesentericus ruber*** Globig [*Bacillus globigii*]
1098. Prof. A. V. Ling, Birmingham. *Lewis.* 1921
1930. *Bulloch.* Isolated from cat-gut by Prof. Bulloch, London Hosp., 1924. 1924
One other strain.

***B. mesentericus vulgatus*** Flügge [*Bacillus vulgatus*]
1097. Prof. A. V. Ling, Birmingham. *Potato.* Isolated from potato tuber, 1921. 1921

***B. methanicus*** Söhn [*Methanomonas methanici*]
1360. Dr. A. Thaysen, Holton Heath, Dorset. 1922

***B. michiganense*** E. F. Smith [*Phytomonas michiganensis*]
1962. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. Cause of Grand Rapids disease of tomato. (*Bacterial Diseases of Plants*, E. F. Smith, 1920.) 1924

***B. Morax-Axenfeld*** [*Hemophilus lacunatus*]
1610. Isolated by Dr. P. Fildes, London Hosp., from case of sub-acute conjunctivitis. 1923

***B. morgani*** (syn. *B. Morgan* No. 1)
235. *33 M.* Isolated by H. de R. Morgan from case of summer diarrhoea. (*Brit. M. J.*, 1906, i, 208.) 1920
417. American Museum of Natural History, type strain. *692.* Stool of infant at Providence City Hosp. 1920
3 other strains.

***B. mori*** Boy. and Lam. (Smith) [*Phytomonas mori*]
1966. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. *E.F.S.* Isolated 1921 from mulberry twig. 1924
957. *Wormald I.* Isolated from mulberry blight 1920, by Dr. H. Wormald, S. E. Agric. Coll., Wye. (*Ann. Applied Biol.*, 1924, **9**, 169.) 1921
Another strain.

***B. multifermentans tenalbus*** Stoddard [*Clostridium multifermentans*]
2032. Miss M. Robertson. Recovered by Dr. Stoddard from case of gas gangrene, 1919. Non-pathogenic. (*Lancet*, 1919, i, 12.) 1924

***B. murisepticus*** (Flügge) Migula
807 A. *Topley A.* Isolated from spontaneous mouse epizootic by Dr. W. W. C. Topley, Charing Cross Hosp. 1921
3 other strains.

***B. mycoides*** Flügge

143 A. Prof. Hewlett (1918). *Hewlett.* 1920

926. H. G. Thornton. *C. R. ii Rothamsted.* Soil, Rothamsted Experimental Station, Harpenden, Herts. 1921

One other strain (No. 1651).

***B. neapolitanus*** Fraenkel [*Escherichia neapolitana*]

414. American Museum of Natural History, type strain. *126.* Urinary fistula, 1911. (*J. Bact.*, 1919, **4**, 429.) 1920

One other strain (No. 660).

***B. nephritidis equi*** Meyer, 1910. See *B. viscosum equi*

***B. oedematiens*** Weinberg and Séguin [*Clostridium oedematiens*]

277. *Cossard.* Isolated by Miss M. Robertson in Weinberg's Laboratory, Paris, from fatal case of gas gangrene, 1918. (*Compt. rend.* 1920. *Acad. d. Sc.*, 1914, **77**, 506.)

3 other strains.

***B. ovisepticus***

1877. Dr. Houghton, Parke Davis Co., Detroit, U.S.A. *08366.* Used in preparation of sera in ovine haemorrhagic septicaemia. 1924

***B. ozaenae*** Perez [*Encapsulatus ozenae*]

459. Dr. Ferry. *110895.* Isolated by H. C. Ward in Parke Davis Co. Lab., Detroit, U.S.A. 1920

One other strain (No. 1060).

***B. panici*** Elliott

1970. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. *Isolation V.* 1924

***B. paracoli*** Jensen (*B. enteritidis* Gärtner)

577. Sir F. W. Andrewes. *Calf No. 1306.* Isolated by Prof. Jensen, Copenhagen, from enteritis in calves. 1920

Two other strains (Nos. 578 and 579) from calves, Copenhagen.

***B. paradysenteriae*** Mita

1171. *Type A.*

1772. *Type B.* Dr. Ko Mita. (See *J. Infect. Dis.*, 1921, **29**, 580.) 1921

***B. paramelitensis***

(Feusier and Meyer's *B. melitensis*, Group IV)

82. Dr. Nicolle, Tunis. *Bassett-Smith*, originally *Br.* 1920

2065. Dr. Burnet, Tunis. *Chèvre 83.* Goat strain. 1925

6 other strains.

***B. parasporogenes*** McIntosh [*Clostridium parasporogenes*]

276. Miss M. Robertson. *R. 60 XV.* Material from an outbreak of 'blackleg' in Ireland. 1920

***B. paratyphosus A*** Schottmüller [*Salmonella paratyphi*]

13. Lister Inst. *Schottmüller.* Original Schottmüller strain. 1920

133. *Haddon.* Blood, King George Hospital, London, 1915. 1920

420. American Museum of Natural History, type strain. *16.* (*J. Bact.*, 1919, **4**, 429.) 1920

4 other strains.

***B. paratyphosus B*** Schottmüller (*Salmonella*, type Schottmüller) [*Salmonella schottmülleri*]

15. Lister Inst. *Schottmüller-Bainbridge.* Original Schottmüller strain. 1920
14. *Tidy.* Blood, King George Hospital, London, 1915. 1920
156. Lister Inst. *Achard.* Original Achard strain. 1920
421. American Museum of Natural History, type strain. *22.* (*J. Bact.*, 1919, **4**, 429.) 1920
2033. *Augenklinik.* Isolated by Dr. P. Wichels, Göttingen, from outbreak of food-poisoning (gastro-enteritis), 1925. (*Klin. Wchnschr.*, 1924, **10**, 400.) 1925
267. *Thjøtta.* Mucoid variety. Isolated by Thjøtta. 1920
359. *Fletcher.* Mucoid capsulated variety. Isolated by Fletcher from urine, 1917. (*Lancet*, 1918, ii, 102.) 1920

11 other strains.

***B. paratyphosus C*** Hirschfeld (*Salmonella*, serological type Eastern Hog cholera)

90. *Para C.* Original strain isolated by Hirschfeld in Salonika. (*Lancet*, 1919, i, 296.) 1920
96. *Bagdad 31.* Isolated by MacAdam, 1918. (*J. Roy. Army Med. Corps*, 1919, **33**, 140.) 1920
99. *Bagdad 782.* Isolated by Major Gloster, I.M.S., 1917. 1920
777. *East Africa.* Isolated by R. P. Garrow from blood in case in Portuguese East Africa. (*Lancet*, 1920, i, 1221.) 1920
93. *Priddis.* Isolated from 'typhoid' case, Peshawar, 1914. (*Lancet*, 1920, i, 95.) 1920

4 other strains.

***B. paratyphosus C*** Hirschfeld (*Salmonella*, serological type English Hog cholera)

1249. Lt.-Col. Marrian Perry, R.A.M.C. *Shutler.* Blood culture; case of mild pyrexia. 1922
1710. Dr. Eric Wordley, S. Devon and E. Cornwall Hospital, 1923. *Ford.* (*Brit. M. J.*, 1923, ii, 105.) 1923
1713. Dr. J. Duncan. *Alfonso.* Blood of 'enteric' case, Royal Albert Dock Hospital. (*J. Hygiene*, 1924, **22**, 1.) 1923
1727. *Leeds.* Isolated by Dr. McLeod from infant. 1914. 1923
1728. *Mudd.* Abscess of deltoid bursa, London Hospital, 1923. 1923
309. *Postulat.* Isolated by Fry and Lundie from German prisoner of war. Rouen, 1919. (*Lancet*, 1919, ii, 51.) 1920

***B. paratyphosus C*** Heimann (*Salmonella*, serological type English Hog cholera)

749. Král, Vienna. Food-poisoning in Man. (*Centralbl. f. Bakt.* (&c.) *Orig.* 1912, **66**, 211.) 1920

***B. pasteurianum*** Hansen [*Acetobacter pasteurianus*]

613. A. Jörgensen, Copenhagen. *Thaysen.* Vinegar. 1920

***B. pelargoni*** N. A. Brown

1978. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. Causes bacterial leaf spot disease of cultivated geranium. (*J. Agric. Res.*, 1923, **22**, 361.) 1924

***B. pertussis.*** Bordet [*Hemophilus pertussis*]

364. Prof. Hektoen through St. Mary's Hosp., London. *Hektoen.* 1920

4 other strains.

***B. pestis*** Yersin and Kitasato [*Pasteurella pestis*]

144 A. *Parel.* Guinea-pig inoculated, 1920, with strains of *B. pestis*, stock organisms used for making Haffkine's prophylactic vaccine at Parel, Bombay. 1920

2027. Dr. Wu Lien Teh, Harbin, Manchuria. *Manchuria.* 1925

2028. Dr. L. Otten, Pasteur Inst., Bandoeng, Java. *Java.* 1925

5 other strains.

***B. pestis caviae*** Smith

1640. *Mouse Typhoid ii. Webster.* Used by Dr. L. T. Webster in his studies of protection and immunity. Closely related to *B. suipestifer* Type Mutton of Schütze (*Salmonella*, type Aertrycke). (*J. Exper. M.*, 1922, **36**, 97.) 1923

***B. pfaffi*** Hadley See *B. canariense* Migula

***B. phaseoli*** E. F. Smith [*Phytomonas phaseoli*]

1968. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. Bacterial blight of bean, 1923. *Col. I.* (See *Bacterial Diseases of Plants*, E. F. Smith, 1920.) 1924

***B. phaseoli*** var. ***sojense***

1972. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. Bacterial pustule of soy bean. 1924

***B. phasianicida*** Klein. See *B. gallinarum* Klein

***B. phlei*** Moeller [*Mycobacterium phlei*]

525. National Biological Museum, N.Y. *Hay.* Hay. 1920

One other strain (No. 54).

***B. phosphorescens*** Fischer

1731. Dr. Louis Cobbett, Cambridge. 1924

Another strain.

***B. phytophthorus*** Appel

1985. Prof. Appel, 1906. Causes bacterial black rot of potato. (*Bacterial Diseases of Plants*, E. F. Smith, 1920.) 1924

Another strain.

***B. pneumoniae*** Friedländer [*Encapsulatus pneumoniae*]

204. *L.I.P.M.* Probably original Friedländer strain. 1920

***B. prodigiosus*** Cohn [*Serratia marcescens*]

1404. Prof. R. T. Hewlett. *Milk.* Isolated from milk, 1922. 1922

2 other strains (Nos. 1695 and 1377).

***B. proteamaculans*** Paine

394. Isolated by Dr. S. G. Paine, Imp. Coll. of Science, S. Kensington, from diseased leaves of *Protea cynaroides*, Kew Gardens, 1918. (*Ann. Applied Biol.*, 1919, **6**, 27.) 1920

***B. proteus anindologenes*** van Loghem

59. Prof. van Loghem, Amsterdam. *Elders.* Case of Indian sprue. (*Ann. de l'Inst. Past.*, 1918, **32**, 295.) 1920

***B. proteus mirabilis*** Hauser [*Proteus mirabilis*]

403. University of Michigan. *Novy.* Through Prof. Rettger. (*J. Bact.*, 1919, **4**, 331.) 1920

***B. proteus vulgaris*** Hauser [*Proteus vulgaris*]

67. *X. 19.* Strain used in the Weil-Felix reaction. 1920

401. New York University. *N.Y.U.* Through Prof. Rettger. (*J. Bact.*, 1919, **4**, 331.) 1920

***B. proteus zenkeri*** Hauser [*Zopfius zenkeri*]
405. University of Chicago. *Chicago.* Through Prof. Rettger. (*J. Bact.*, 1919, **4**, 331.) 1916
17 other strains of *B. proteus* of various types.

***B. pruni*** E. F. Smith [*Phytomonas pruni*]
1963. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. Cause of 'black spot' and canker in plum, peach, &c. (See *Bacterial Diseases of Plants*, E. F. Smith, 1920.) 1924

***B. pseudotuberculosis rodentium***
941. *Guinea-pig 3. a.* Isolated by Dr. Schütze at Lister Inst. from lesion of guinea-pig, 1921. 1921
824. Dr. David, Statens Bakt. Lab., Stockholm. *Stockholm.* 1921
4 other strains.
1069. (Var. *coloniensis*.) Dr. Reiner Müller, Cologne. (*Central. f. Bakt.*, I, 1921, **86**, 564.) 1921

***B. psittacosis*** (*Salmonella*, type Aertrycke) [*Salmonella psittacosis*]
1951. Isolated by Lt.-Col. Marrian Perry during epizootic among grey touracous (*Schizoris concolor*). (*Brit. J. Exper. Path.*, 1920, **1**, 131.) 1925
Another strain (No. 776).

***B. pullorum*** Rettger [*Salmonella pullora*]
397. *17.* Isolated by Prof. Rettger, Yale, from affected chicks, 1917. (*J. Med. Research*, 1916–17, **35**, 443.) 1920
970. *Chick II.* Isolated at National Collection of Type Cultures from necrotic area in lung of affected chick, 1921. Material supplied by Miss Edith Knight. 1921
7 other strains.
(For notes on above, see St. John-Brooks and Rhodes, *J. Path. and Bact.*, 1923, **26**, 433.)

***B. putrificus coli***
260. Lister Inst. *L.I.P.M.* 1920

***B. pyocyaneus*** [*Pseudomonas aeruginosa*]
1999. Fildes III. Isolated from pyaemic abscess, London Hospital, 1924. 1924.
254. Lister Inst. *Goat.* Stomach contents of goat, 1913. 1920
10 other strains from man, monkeys, kangaroos, pandas, &c.

***B. radiobacter*** (Beij.) Lohnis
1376. Prof. Kluyver, Delft, Holland. 1922

***B. rettgeri*** Hadley [*Eberthella rettgeri*]
1501. Dr. H. G. May. *50.* Isolated from fowl, Thompsonville, Conn., U.S.A., by Prof. Rettger, 1911. (*Rhode Is. Expt. Sta. Bul.*, 1918, **174**, 1.) 1922

***Bacillus of Rhinoscleroma*** [*Encapsulatus rhinoscleromatis*]
1936. Dr. Snijders, Amsterdam. *5.* Isolated in Sumatra from case of rhinoscleroma. 1925

***B. rossicum*** Kell. [*Cellulomonas rossica*]
1655. Kellerman's original strain received through Král and Rothamsted Experimental Station. Cellulose decomposing organism. (*Centralbl. f. Bakt.*, II, 1912, **34**, 485.) 1923

***B. salmonicida*** Emmerich and Weibel
2026. Isolated from a grayling and determined by Dr. Arkwright, Lister Inst. 1925. 1925

***B. sanguinarium*** Moore [*Eberthella sanguinaria*]. See *B. gallinarum* Klein.

***B. schmitz***
306. Sir F. W. Andrewes. *Hawkins.* Isolated by Dr. W. Fletcher from dysentery patient, University War Hosp., Southampton, 1918. 1920

***Bacillus of Schweinepest*** (*Salmonella*, type Aertrycke)
748. Král, Vienna. *Schnürer.* Swine fever. 1920

***B. smegmatis*** Alvares and Tavel [*Mycobacterium smegmatis*]
523. National Biological Museum. *New York.* 1920
One other strain (No. 53).

***B. solanisaprus*** Harrison [*Erwinia solanisapra*]
385. Museum of Natural History, Washington, D.C. *Washington.* Causes 'soft rot' in potato. (*J. Agric. Sc.*, 1917, **8**, 480.) 1920

***B. sphenoides*** Douglas, Fleming and Colebrook [*Clostridium sphenoides*]
507. Miss M. Robertson. *Tholby.* 1920

***B. sporogenes*** Metchnikoff [*Clostridium sporogenes*]
533. *Bellette.* Isolated by Miss M. Robertson from a case of severe local gangrene, 1918. 1920
3 other strains.

***B. stewarti*** E. F. Smith [*Phytomonas stewarti*]
1969. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. *557.* Causes Stewart's disease of maize. (See *Bacterial Diseases of Plants*, E. F. Smith, 1920.) 1924

***B. subtilis*** (Ehrenberg) Cohn.
85. Lister Inst. *Hay.* Hay, 1916. 1920
2 other strains (Nos. 1049 and 1050).

***B. suipestifer*** (*Salmonella*, serological type Aertrycke) [*Salmonella suipestifer*]
74. *Mutton.* Food-poisoning in Man, Newcastle, 1911. 1920
115. *Woodhead* Isolated by Lieut.-Col. Martin from blood in case of food-poisoning in France. (*J. Roy. Army Med. Corps*, 1919, **33**, 37.) 1920
4 other strains from same outbreak of food-poisoning (Nos. 116, 117, 118, 119).
178. *MacConkey.* Isolated by Dr. MacConkey from cooked rabbit, consumption of which caused fatal infection in child. (*J. Hyg.*, 1905, **6**, 570.) 1920
32. *Calf 32. Blood.* Isolated by Major Gloster, I.M.S., from blood of calf, epizootic of enteritis in calves, Amara, Mesopotamia, 1918. 1920
2 other strains from this epizootic (Nos. 31 and 33).
106. *Skunk.* Isolated by Dr. McGowan from spleen of skunk, epizootic in skunk farm in north of England. 1920
959. *G.P.K. 1.* Epizootic among guinea-pigs at Lister Inst. 1920. 1921

***B. suipestifer*** (*Salmonella*, serological type American Hog cholera)

179. *Arkansas.* (Old Lister Inst. strain.) Hog cholera. (Schütze, *Lancet*, 1920, i, 93.) 1920

356. Dr. C. TenBroeck. *XII.* Pig. (*J. Exper. M.*, 1918, **28**, 759.) 1920

1587. Dr. E. O. Jordan. *165. Rough.* Spleen of Hog. (*J. Infect. Dis.*, 1917, **20**, 457.) 1923

1588. Dr. Jordan. *171.* Lung of hog. 1923

1590. Dr. Jordan. *257.* Faeces of hog. 1923

1591. Dr. Jordan. *280.* Lung of hog. 1923

***B. suipestifer*** (*Salmonella*, serological type Binns)

73. *Binns.* Isolated by Dr. McNee from a case of food-poisoning in Man, France, 1917. 1920

175. *Arkwright I.* Isolated by Dr. Arkwright in Malta. 1920

***B. suipestifer*** (*Salmonella*, serological type Derby)

1729. Isolated by Dr. C. F. Peckham, from tank water and from pork pies at Derby, 37 cases of food-poisoning. (*J. Hyg.*, 1923, **22**, 69.) 1923

***B. suipestifer*** (*Salmonella*, serological type English Hog cholera)

91. *G.* Isolated at Lister Inst. from mesenteric gland of a monkey that died in the course of a dietetic experiment, 1917. 1920

1771. *S. F. 7000.* Isolated at Ministry of Agriculture Veterinary Laboratory, New Haw, from mesenteric glands, swine fever. 1924

1772. *S. F. 6917.* Isolated at New Haw, from caecum in case of swine fever. 1924

1773. Isolated at New Haw from gland in case of swine fever. 1924

***B. suipestifer*** Uhlenhuth (*Salmonella*, serological type Hog cholera)

352. Reichsgesundheitsamt, Berlin. 1920

5 other strains of porcine origin (Nos. 347, 349, 350, 351, 356).

***B. suipestifer*** (*Salmonella*, serological type L)

1946. *L II.* Isolated from human faeces, outbreak of food-poisoning at Reading. Isolated and determined by Dr. P. Bruce White, 1923. 1925

***B. suipestifer*** (*Salmonella*, serological type Newport)

129. *Newport.* Isolated from case of fatal food-poisoning in Man, 1915. (Schütze, *Lancet*, 1919, i, 93.) 1920

726. *Liston 197.* Isolated by Major Glen Liston, I.M.S., from stool of 'Para B' carrier, Richmond, 1917. Typed by Schütze, Oct. 1921. 1920

1857. Dr. Schütze. *Slade.* 1924

***B. suipestifer*** (*Salmonella*, serological type Reading)

72. *Reading.* Isolated by Dr. Schütze from water-supply, Reading, 1916. 1920

1878. *Guinea-pig.* Isolated from guinea-pig epizootic at Lister Inst., 1924. 1924

***B. suipestifer*** (*Salmonella*, serological type Stanley)

92. *Stanley.* Isolated by Prof. Hutchens from case of food-poisoning in Man, 1917. 1920

1705. *Britton.* Isolated by Capt. Fletcher, Southampton War Hospital, from urine and blood of 'paratyphoid' case, 1917. 1923

***B. suis*** (*Salmonella*, serological type Aertrycke)
425. Dr. Krumwiede, New York. *112.* Source unknown. 1920

***B. suis*** (*Salmonella*, serological type Hog cholera)
426. Dr. Krumwiede, New York. *131.* 1920

***B. suisepticus*** [*Pasteurella suiseptica*]
1875. Dr. Houghton, Parke Davis Co., Detroit, U.S.A. *98368.* Used in preparation of sera in porcine haemorrhagic septicaemia. 1921
2 other strains (Nos. 1737 and 1738)

***Bacillus of Swine typhus*** (*Salmonella*, serological type Aertrycke)
355. *V.* Isolated by Dr. TenBroeck from pig inoculated with filtered emulsion of viscera of pig dead of hog cholera virus, 1918. (*J. Exper. M.*, 1918, **28**, 759.) 1920

***B. syringae*** (Van Hall) E. F. Smith
1974. Isolated from lilac blight. From Dr. Erwin F. Smith, U.S. Dept. of Agriculture. (See *Bacterial Diseases of Plants*, E. F. Smith, 1920.) 1924

***B. tabacum*** Wolf and Foster [*Phytomonas tobacae*]
1964. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. Cause of 'wild fire' in tobacco. (*J. Agric. Research*, 1918, **12**, 449.) 1924

***B. tertius*** Henry [*Clostridium tertium*]
336. Miss M. Robertson. *P. 7. IX.* Case of gas gangrene, 1915. (*J. Path. and Bact.*, 1916–17, **21**, 344.) 1920
2 other strains.

***B. tetani*** Nicolaier [*Clostridium tetani*]
280. Miss M. Robertson. *T. 3. V.* Tetanus patient, 1917. 1920

*Tulloch's Types* (*Proc. Roy. Soc.*, 1919, B. **90**, 145)
279. Type I. Stock culture of unknown origin, purified by Miss Robertson. *U.S.A. II.* 1920
540. Type II. Miss Robertson. *T. 67.* Tetanus patient, 1917. 1920
539. Type III. Miss Robertson. *R. 220. E.* Tetanus patient, 1917. 1920
75 other strains classified according to (1) origin (cases of tetanus, 6; normal human faeces, 2; horse dung, 34; soil, 33). (2) Toxicity (45 toxic, 30 non-toxic). (3) Serological type (Type I, 13; II, 6; III, 14; IV, 0; IV–V, 3; V, 39). See P. Fildes. *Brit. J. Exper. Path.*, 1925, **6**, 62.
6 other strains received from Dr. TenBroeck, Pekin Union Med. Coll., China. (*Proc. Soc. Exper. Biol. and Med.*, 1924, **21**, 265.)

***B. tetanomorphus*** [*Clostridium tetanomorphum*]
500. Miss M. Robertson. *146 T.B.I.* Septic wound which also harboured a toxic strain of *B. tetani*. (*M.R.C., Special Report Series*, 1919, No. 39, 41.) 1920
2 other strains.

***B. tolaasi*** Paine
392. *Mushroom.* Isolated by Dr. S. G. Paine from mushroom infected with brown spot disease, 1916. (*Ann. Applied Biol.*, 1919, **5**, 206.) 1920

***B. tracheiphilus*** E. F. Smith [*Erwinia tracheiphila*]
1983. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. Cause of cucurbit wilt. (See *Bacterial Diseases of Plants*, E. F. Smith, 1920.) 1924

***B. trifoliorum***

1967. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. Isolated from clover leaf (*Trifolium repens*). 1924

***B. truffautii*** Truffaut and Bezssonoff

1490. Nitrogen-fixing organism isolated from garden soil by M. Georges Truffaut. (*Compt. rend. Acad. d. Sc.*, 1922, **175**, 544.) 1922

***B. truttae.*** See *B. salmonicida*

***B. tuberculosis*** [*Mycobacterium avium*]

*Avian Type*

51. Dr. A. Stanley Griffith. *Z. 8.* Isolated from liver of black-winged grackle (*Graculipica melanoptera*) from Zoological Gardens, London, 1915. 1920

2007. Avian virus isolated at Zoological Gardens by Dr. Nathl. Lucas from rufous rat kangaroo (*Aepyprymnus rufescens*), 1923. (*J. Path.*, 1924, **28**, 123.) 1924

Another strain

***B. tuberculosis*** [*Mycobacterium tuberculosis* (*bovis*)]

*Bovine Type*

46. Dr. A. Stanley Griffith. *No. 1.* Bovine virus (Dysgonic Class) I. Isolated from tubercular pharyngeal gland of cow, 1914. 1920

47. Dr. A. Stanley Griffith. *No. 4.* Bovine virus (Class II). Perlsucht growths of a bovine, 1914. 1920

913. Dr. R. A. O'Brien. *B4.* Strain used by Messrs. Burroughs, Wellcome & Co. in manufacture of bovine tuberculin. 1921

1782. Dr. A. Stanley Griffith. *No. 14.* From tuberculous retropharyngeal gland of bovine. Highly virulent, 1923. 1924

5 other strains.

***B. tuberculosis***

*Cold-Blooded Type*

2014. Cayman strain. Isolated by Dr. A. S. Griffith from tubercular material from cayman, supplied by Dr. Lucas. 1925

[*Mycobacterium piscium*]

1542. Král, Vienna. Fish tubercle. 1923

[*Mycobacterium chelonei*]

946. Col. Marrian Perry, R.A.M. College. Tortoise strain. *Friedmann.* Obtained in Prague by Col. Russel, U.S. Med. Service, 1921. 1921

2006. *Vevers.* Terrapin strain. Isolated by Dr. G. S. Wilson from tubercular material from terrapin dying in Zoological Gardens, London, 1923. 1925

[*Mycobacterium ranae*]

2013. Frog strain. Isolated by Dr. A. S. Griffith from tubercular material from paradoxical frog, supplied by Dr. N. Lucas, Zoological Gardens, London. (*J. Path.*, 1925, **28**, 69.) 1925

***B. tuberculosis*** [*Mycobacterium tuberculosis* (*hominum*)]

*Human Type*

48. Dr. A. Stanley Griffith. *Lyons.* Human virus (Eugonic). Sputum of a child, 1918. 1920

52. Dr. A. Stanley Griffith. *C. G. 116.* Human virus (Dysgonic). Pus aspirated from cervical gland of a boy, 1915. 1920

50. Dr. A. Stanley Griffith. *H. 151* (*6*). Human virus (Eugonic), attenuated. Generalized intractable lupus, 1919. 1920

5 other strains.

***B. tumefaciens*** Smith and Townsend [*Phytomonas tumefaciens*]
1976. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. Crown gall organism isolated from Peach tumour. 1924
1236. Dr. Erwin F. Smith. Hop strain. Used by Dr. Wormald to induce crown galls on *Chrysanthemum coronarium*. 1922
1997. Dr. Erwin F. Smith. Daisy strain. (*See Bacterial Diseases of Plants*, E. F. Smith, 1920.) 1924

***B. typhi suis*** Glässer (*Salmonella*, type Hirschfeld)
348. Reichsgesundheitsamt, Berlin. *Poppe*. 1920

***B. typhosus*** Eberth [*Eberthella typhi*]
163. King George Hosp. *Howard*. Type strain. Isolated, 1916. 1920
786. *Lister*. Maintained specially for use in testing disinfectants. 1920
160. *Rawlings*. Employed in Britain and America for preparation of typhoid vaccine. 1920
18 other strains isolated from various sources (blood, faeces, and urine of cases and chronic carriers).

***B. ureae*** Leube
1654. Prof. Beijerinck. (*Centralbl. f. Bakt.*, II, 1901, **7**, 51.) 1923

***B. violaceus*** Bergonzoni [*Chromobacterium violaceum*]
1539. *W.N.M.* Isolated from ditch at Cambridge by Dr. Louis Cobbett. 1923
One other strain (No. 1714)

***B. viridilividum*** N. A. Brown [*Phytomonas viridilivida*]
1980. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. A cause of bacterial soft rot of lettuces. (*J. Agric. Research*, 1918, **13**, 367.) 1924

***B. viscosum equi*** Adsersen and Magnusson
932. Dr. H. Magnusson, Malmö, Sweden. *Magnusson*. Foal with polyarthritis and embolic nephritis. (*J. Comp. Path. and Therap.*, 1919, **32**, 143.) 1921
One other strain (No. 1084)

***B. vitians*** N. A. Brown [*Phytomonas vitians*]
1979. Dr. Erwin F. Smith, U.S. Dept. of Agriculture. A cause of bacterial soft rot of lettuces. (*J. Agric. Research*, 1918, **13**, 367.) 1924

***B. voldagsen*** Dammann (*Salmonella*, serological type Hog cholera)
346. Reichsgesundheitsamt, Berlin. 1920

***B. voldagsen*** Wegener (*Salmonella*, serological type Hog cholera)
747. Král, Vienna. Food-poisoning in Man. (*Ztschr. f. Hyg. u. Infektionskrankh.*, 1913, **73**, 65.) 1920

***B. volutans*** Thaysen
620. Dr. A. Thaysen, Holton Heath, Dorset. *Thaysen*. (*J. Inst. of Brewing*, 1921, **27**, 529.) 1920

***B. welchii*** Migula [*Clostridium welchii*]
273. *S.R. 9*. Isolated by Miss M. Robertson, Lister Inst., from fatal case of gas gangrene, 1914. 1920
5 other strains.
(See *M.R.C. Special Report Series*, 1919, No. 39, 17.)

***B. whitmori*** Stanton and Fletcher

1690. Dr. W. Fletcher, Federated Malay States. *Ragaviah. Mucoid.* Melioidosis in man. 1923
2 other strains (Nos. 1689 and 1691).

1688. Dr. W. Fletcher. *Rat.* Melioidosis in rodent. (*J. Hyg.*, 1925, **23**, 347.) 1923

***B. xylinum*** A. Br. [*Acetobacter xylinus*]

1648. Král, Vienna. *Janke.* (*J. Chem. Soc.*, 1886, **1**, 432.) 1923
One other strain (No. 1375).

***Bacterium 'X'*** A. Br.

972. Prof. Ling, F.I.C. *Adrian Brown.* Recovered from Prof. Adrian Brown's stock culture. Closely resembles *Saccharobacillus pastorianus* van Laer. (*J. Inst. Brewing*, 1910, **16**, 641.) 1921

***Beauveria bassiana*** (Bals.) Vuill.

1801. Centraalbureau, Baarn, through Imp. Bur. Mycol. Isolated and determined by Le Moult. 1924

***Beauveria densa*** (Link) Picard

1659 A. From *Hylastes ater*. Isolated and determined by Imp. Bur. Mycol. 1923

***Beauveria globulifera*** (Speg.) Picard

1142. Isolated and determined by Imp. Bureau Mycol. From *Scolytis intricata* of oak. 1921
One other strain (No. 1858).

***Blastomyces***

1641. *M.H.* Isolated by Dr. J. R. Williams, Melbourne Hospital, Victoria, from cerebro-spinal fluid. Systemic blastomycosis, 1922. (*Med. J. Australia*, 1922, **2**, 185.) 1923

1642. Miss Williams, Melbourne Hospital. *Sydney.* 1923

271. Col. Cummins. *Pink.* Blood, chronic blastomycosis, Military Hosp., Millbank, 1919. 1920

272. Col. Cummins. *White.* Urine in above case. 1920

***Botryosporium longibrachiatum*** (Oud.) Maire

1261. Imp. Bur. Mycol. Isolated from diseased *Dracaena* in Kew Gardens. 1922

***Botrytis allii*** Munn

1494. Imp. Bur. Mycol. Isolated by Mr. W. Buddin, Reading. 1922

***Botrytis cinerea*** Pers.

852. Dr. Henderson Smith, Rothamsted Experimental Station. (*Ann. Applied Biol.*, 1923, **10**, 335.) 1921

1189. Isolated by Mrs. N. L. Alcock, F.L.S., from fig from Worthing. Biological strain. 1922

1075. Isolated by Mrs. N. L. Alcock, F.L.S., from diseased quince. Biological strain. 1921

***Botrytis paeoniae*** Oud.

1138. Isolated by Dr. W. J. Dowson, Royal Hort. Soc. Gardens, Wisley, from wilted paeony, 1921. 1921
One other strain (No. 1213).

***Botrytis pyramidalis*** (Sacc.) Johnson

1448. Isolated from soil, Rothamsted Experimental Station, Harpenden, *13A423*, 1920. 1920

***Botrytis tulipae*** (Lib.) Hopk.
1496. Isolated by Miss E. M. Wakefield from diseased tulip at Kew Gardens, 1921. 1922
One other strain (No. 1495).

***Botrytis sp.***
1008. *Canvas.* Isolated by Miss Lorrain Smith from rotting tent canvas. 1920

***Boudiera clausenii*** Henn.
1832. Carlsberg Laboratorium. *237.* 1924

***Brucella abortus*** Feusier and Meyer. See *B. abortus*

***Brucella melitensis.*** See *B. melitensis*

***Butter bacillus.*** See *Bacilli from butter*

***Candida breve*** Berkh.
1740. Bainier Collection. *4719. 9.* 1924

***Candida candida*** Berkh. See *Monilia candida* Bon.

***Candida chodati*** Berkh.
1739. Bainier Collection. *4719. 5.* 1924

***Carlsberg Unterhefe I.*** See *Saccharomyces carlsbergensis*

***Carlsberg Unterhefe II.*** See *S. monacensis*

***Catenularia fuliginea*** Saïto
1222. Dr. H. G. Derx, Delft, Holland, 1921. 1922

***Cephalosporium asteris*** Dowson
1603. *No. 10.* Isolated by Mr. W. J. Dowson, R.H.S. Gardens, Wisley. 1923

***Cephalosporium longisporum*** Petch.
1859. From *Icerya purchasi.* Isolated by Mr. T. Petch, Peradeniya, Ceylon. 1924

***Cephalosporium sacchari*** Butl.
1145. Dr. E. J. Butler, Kew. Isolated by Dr. F. J. S. Shaw, Agric. Research Station, Pusa, India. 1921

***Cephalothecium roseum*** Corda
1131. Isolated by F. T. Brooks, Dept. of Botany, Cambridge, from partly rotten apple, 1921. 1921

***Cercosporella antirrhini*** Wakef.
1364. Leaf spot disease of Snapdragons. Isolated by W. J. Dowson, R.H.S. Gardens, Wisley. 1922

***Ceuthospora lunata*** Shear
1315. *No. 121.* Isolated from cranberry by Dr. Shear, Washington, D.C., U.S.A. 1922

***Circinella minor*** Lendn.
1791. Geo. W. Martin, University of Iowa, U.S.A. 1924

***Citromyces B*** Wehmer
606. A. Jörgensen, Copenhagen. *Thaysen.* 1920

***Cladosporium fulvum*** Cooke
1182. *M. 101.* Isolated by S. P. Wiltshire, Long Ashton, Bristol, from diseased tomato leaves. 1922
One other strain (No. 1592).

***Clostridium pasteurianum*** Winogr.
1649. Bredemann. 1923

***Clostridium polymyxa*** Prazm.
1380. Dr A. J. Kluyver, Technical High School, Delft, Holland. 1922

***Coccidioides immitis*** Rixford and Gilchrist
883. *3.* Isolated by Dr. K. F. Meyer, University of California, from case of San Joaquin Valley disease or coccidioidal granuloma, 1915. 1921
884. *1.* Source as in No. 883 1920

***Coccobacillus acridiorum*** d'Hérelle
1804. Isolated from diseased locusts by Dr. d'Hérelle. (*C. R. Acad. d. Sc.*, 1912, **154**, 623.) 1924

***Coliform organisms.*** See *Bacillus* (*coliform*)

***Colletotrichum camelliae*** Mass.
1947. Imp. Bur. Mycol., Kew. Isolated and determined by A. C. Tunstall, Assam. 1925

***Colletotrichum lindemuthianum*** (Sacc.) Bres.
1606. From anthracnose of beans. Isolated by W. J. Dowson, R.H.S. Gardens, Wisley. 1923

***Colletotrichum linicolum*** Pethyb. and Laff.
1194. Isolated from seedling blight of flax by Dr. Geo. H. Pethybridge. 1922

***Colletotrichum phomoides*** (Sacc.) Chester
1130. F. T. Brooks, Cambridge. Tomato disease, Washington, D.C., U.S.A. 1921

***Coniothecium chomatosporum*** Corda
1948. Imp. Bur. Mycol., Kew. Isolated and determined by C. H. Cunningham, New Zealand. From apple. 1925

***Coniothryium convolutum*** Horne and Horne
1768. Dr. Horne, Imp. Col'. of Science, S. Kensington. Parasitic. (*Ann. Applied Biol.*, 1920, **7**, 183.) 1924

***Corynebacterium coryzae segmentosum***
934. Sir F. W. Andrewes. *Graham.* Case of nasal catarrh, 1920 1921

***Corynebacterium diphtheriae*** Klebs-Löffler

*Strains isolated from Man*

380. Lister Inst., Elstree. *Park's No. 8* (*Elstree 18/79*). used in manufacture of diphtheria antitoxin. 1920
322. *Gentry.* Source as in No. 321. Non-virulent. 1920
9 other strains from Man.

*Strains isolated from Horses*

853. Dr. Petrie, Elstree. *Horse G.* Isolated prior to June 1918 by Capt. Minett, R.A.V.C., from pus from suspected case of ulcerative lymphangitis. (*J. Comp. Path. and Therap.*, 1920, **33**, 267.) 1920
6 other strains (Nos. 854–859) isolated by Minett from equine lesions.

*Gordon Bell's Types*

Received from *Major Gordon Bell, R.A.M. College, Millbank*

1051. Group I. *Park 8.* 1921
1054. Group II. *B. W. 66.* 1921
1057. Group III. *B. W. 25.* 1921
6 other strains. 1921

***Corynebacterium diphtheriae*** Klebs-Löffler (*continued*)

*Eagleton and Baxter's Types*

1519. Type I. *79.* 1923
1521. Type II. *46.* 1923
1523. Type III. *55.* 1923
1525. Type IV. *90.* 1923
1527. Type V. *36.* 1923
1529. Type VI. *393.* 1923
1531. Type VII. *516.* 1923
1533. Type VIII. *613* 1923
1535. Type IX. *825.* 1923
1537. Type X. *35.* 1923

(*J. Hyg.*, 1923, **22**, 107.)

1354. *Bacille court.* Martin and Loiseau. (*Bull. méd.*, 1921, **26**, 257.)

***Corynebacteria*** (Diphtheroids) Mrs. M. M. Barratt's Types

1911. Type I. Richardson. 1925
1912. Type II. Nogan 5. 1925
1914. Type III. Agnew. 1925
1916. Type IV. Graham. 1925
1918. Type V. Bowers. 1925
1920. Type Va. Teague. 1925
1922. Type VI. Goodall. 1925
1924. Type VII. Slade. 1925
1926. Type VIII. Cartilage. 1925
1928. Type IX. Oyster. 1925
1929. Type X. Daniels. 1925
1929A. Type XI. Amand 2. 1925

(*J. Hyg.*, 1924, **23**, 241 and *M. R. C. Monograph on Diphtheria*, 1923, ch. 11.)

***Corynebacterium equi*** Magnusson

1621. Isolated by Dr. Magnusson, Malmo, Sweden, from abscess in lung of foal. 1922. 1923

***Corynebacterium hofmannii*** (See *Corynebacteria* (*Diphteroids*). Mrs. M. M. Barratt's Type XI)

231. Lister Inst. *2.* 1920
3 other strains.

(*J. Hyg.*, 1924, **23**, 241 and *M. R. C. Monograph on Diphtheria*, 1923, ch. 11.)

***Corynebacterium pseudotuberculosis*** Preisz-Nocard

621. Capt. Minett, R.A.V.C. *Watson.* Isolated by Capt. Watson, R.A.V.C., from horse suffering from ulcerative lymphangitis in France, 1918. 1920
7 other strains (Nos. 1033–1038).
(See *M. R. C. Monograph on Diphtheria*, 1923, ch. 11.)

***Corynebacterium pseudotuberculosis murium*** Kutscher

949. Dr. W. W. C. Topley, Charing Cross Hosp. *Mouse.* Mouse lesion. Pathogenic to mice. 1921
(See *M. R. C. Monograph on Diphtheria*, 1923.)

***Corynebacterium pyogenes***

1796. Isolated 1924 by Major Jowett, F.R.C.V.S., Edinburgh, from case of bovine mastitis. 1924
1893. Prof. Theo. Smith, Rockefeller Inst., U.S.A. 1924

***Cryptococcus farciminosus*** Rivolta and Micellone.
767. Prof. Nègre, Pasteur Inst., Paris. *Rivolta.* Cause of epizootic lymphangitis in horses. 1920

***Cryptococcus macroglossiae*** Cast.
1869. Prof. Aldo Castellani *1.* Isolated from case of blastomycotic macroglossia in Ceylon. 1924

***Cytosporina ludibunda*** Sacc.
1294. Centralstelle für Pilzkulturen. *5.* 1922

***Cytosporina ribis*** P. Magn.
1184. Isolated from diseased red currant stems by S. P. Wiltshire, Long Ashton, Bristol. (*Ann. Mycolog.*, 1903, **1**, 503, and 1910, **8**, 174.) 1922

***Cunninghamella echidulata*** Thaxter
1792. Geo. W. Martin, University of Iowa, U.S.A. 1924

***Debaryomyces globosus*** Klöcker
477. Dr. A. Klöcker, Carlsberg Lab. *Carlsberg.* 1920

***Dematium pullulans*** de Bary
1547. Centraalbureau voor Schimmelcultures, Baarn, Holland. 1923
Another strain (No. 1745) received as *Pullularia pullulans* Berkh.

***Diaporthe perniciosa*** March.
1682. Forma pruni. Monopycnospore strain *SS 1.* Miss D. M. Cayley, John Innes Horticultural Inst., Merton. (*Ann. Applied Biol.*, 1923, **10**, 253.) 1923

***Diplococcus sp.***
407. Dr. Ruth Tunnicliff. *Measles.* Blood of measles patient, 1907. (*J. Am. M. Ass.*, 1917, **68**, 1028.) 1921

***Diplodia corchori*** Syd.
1358. Dr. F. T. F. Shaw, Pusa, India. Causes black band of jute. (*Mem. Dept. Agric. India Bot. Ser.*, 1921, **11**, 37.) 1922

***Diplodia natalensis*** Evans
1474. Isolated from citrus fruits by Miss E. M. Doidge, Divn. of Botany, Pretoria. 1922

***Diplodiella sp.***
1009. *France.* Isolated by Miss Lorrain Smith from rotting tent canvas from France. 1921

***Diplodina lycopersici*** (Cooke) Hollós
1133. Isolated from tomato stem by F. T. Brooks, Botany School, Cambridge, 1921. (*Brit. Mycolog. Soc. Tr.*, 1921, **7**, 173.) 1921

***Eidamia catenulata*** Horne and Williamson
1766. Isolated from wood of oak. Dr. Horne, Imp. Coll. of Science, S. Kensington. (*Ann. Bot.*, 1923, **37**, 430.) 1924

***Eidamia tuberculata*** Horne and Jones
1765. Isolated from gooseberry bush. Dr. Horne. (*Ann. Bot.*, 1924, **38**, 354.) 1924

***Eidamia viridescens*** Horne and Williamson
1764. Isolated from apples. Dr. Horne. (*Ann. Bot.*, 1923, **37**, 430.) 1924

***'El Tor' Vibrio.*** See *Vibrio El Tor*

***Emmentaler Coccus***
555. Dr. C. Lind, Copenhagen. *Lind.* An acidifying and peptonizing coccus isolated from Emmentaler cheese from Switzerland. 1920

***Endodermophyton indicum*** Castellani
703. Prof. Castellani. Isolated 1911. 1920
(Castellani and Chalmers, *Manual of Tropical Medicine*, 3rd Ed., 1919, pp. 1020 and 2059.)

***Endodermophtyon tropicale*** Cast.
1758. Isolated by Prof. Aldo Castellani, 1914. 1924

***Endomyces fibuliger*** Lindn.
1871. Dr. Ota, Japan. *22.* 1924

***Endomyces hordei*** Saito
1908. Central Laboratory, South Manchurian Railway. 1924

***Enterococcus.*** See *Streptococcus* (*faecal*)

***Epidermophyton rubrum*** Castellani
702. Prof. Castellani. Isolated 1915. 1915
(Castellani and Chalmers, *Manual of Tropical Medicine*, 3rd Ed., 1919, p. 1016.)

***Eurotiopsis gayonii*** Cost.
1824. Carlsberg Laboratorium. 1924

***Eurotium nidulans.*** See *Aspergillus nidulans*

***Faecal streptococci.*** See *Streptococcus* (*faecal*)

***Frohberg yeast.*** See *Yeast* (*Frohberg*)

***Fumago sp.***
968. Cause of black and dark green spots on leather. Isolated by R. Leslie Collett, F.I.C., British Leather Research Ass., 1921. 1921

***Fumago vagans***
986. *South Kensington.* Isolated by R. Leslie Collett, F.I.C., from sooty deposit on bark from Herbarium, Natural History Museum, South Kensington, 1921. Specimen had been conserved for 78 years. 1921

***Fusarium acuminatum*** (Ell. and Ev.) Wr.
1770. Bureau voor Schimmelcultures, Baarn, Holland. 1924

***Fusarium coeruleum*** (Lib.) Sacc.
1141. Isolated from potato by Dr. E. J. Butler, Imp. Bureau of Mycology. 1921

***Fusarium dianthi*** Prill. and Del.
1136. Isolated from carnations by W. J. Dowson, Royal Horticult. Soc. Gardens, Wisley, 1921. 1921

***Fusarium lini*** Bolley
1082. Isolated from wilted linseed by S. N. Sil, Sabour, India. 1921

***Fusarium mali*** Taub.
1887. Dept. of Agric., Canada. *2008.* 1924
One other strain (No. 1767).

***Fusarium solani*** Mart.
1886. Dept. of Agric., Canada. *2006.* 1924

***Fusarium sporotrichoides*** Sherb.
1296. Centralstelle für Pilzkulturen. 1922

***Fusarium vasinfectum*** Atk.
1696. C. Dreschler, Bureau of Plant Industry, Chicago, U.S.A. From cotton. 1923
One other strain (No. 1686).

***Gibberella saubinetii*** (Mont.) Sacc.
1890. Dept. of Agriculture, Canada. Barley scab. 1924

***Gliocladium penicillioides*** Corda
1454. From soil, Rothamsted Experimental Station, 1920. 1922

***Gloeosporium nervisequum*** Fckl.
1839. Prof. Guilliermond. *1109.* 1924

***Glomerella cingulata*** (Lath.) Spauld and von Schrenk
1800. *126.* Isolated from apple by Mr. G. H. Cunningham, New Zealand. 1924

***Gonatorrhodiella coccorum*** Petch
1861. Entomogenous fungus from scale insect. Dr. T. Petch, Peradeniya, Ceylon. 1924

***Gonococcus*** [*Neisseria gonorrheae*]
361. *A. K.* Isolated at St. Thomas's Hospital from urethral discharge. 1924
20 other strains.

***Guignardia vaccinii*** Shear
1318. *No.* 66. Isolated from cranberry by Dr. Shear, Washington, D.C., U.S.A. 1922

***Haemophilic Bacterium***
1485. *No. 94.* Isolated from cerebro-spinal fluid of a child by Dr. Kapsenberg, Groningen, Holland. 1922
2 other strains (Nos. 1486 and 1487).

***Hansenia apiculata*** Reess
817. Prof. Harden, Lister Inst. *Harden.* 1921

***Hansenia apiculata*** Schmitz
816. Prof. Harden. *Harden.* 1921

***Hanseniaspora valbyensis*** Klöcker
478. Isolated from soil, Valby, Copenhagen, by Dr. A. Klöcker, Carlsberg Lab. 1920

***Helicostylum pyriforme*** Bainier
1793. Geo. W. Martin, University of Iowa, U.S.A. 1924

***Helminthosporium inaequale*** Shear
1319. Isolated from cranberry by Dr. Shear, Washington, D.C., U.S.A. 1922

***Helminthosporium sacchari*** Butl.
1357. Imp. Bureau of Mycol., Kew. Isolated by S. F. Ashby. 1922

***Helminthosporium sativum***
1838. Dept. of Agriculture, Canada. *2009.* 1924

***Hemispora rugosa*** Cast.
705. Prof. Castellani. Isolated 1910. 1920
(Castellani and Chalmers, *Manual of Tropical Medicine*, 3rd Ed., 1919, p. 1108.)

***Heterosporium echinulatum*** (Berkh.) Cooke
1137. Isolated by W. J. Dowson, R.H.S. Gardens, Ripley, from carnations, 1921. 1921

***Kefir Yeast.*** See *Yeast* (*Kefir*)

***Koch-Weeks' Bacillus*** [*Hemophilus conjunctivitidis*]

989. Isolated by Mr. S. H. Browning, Roy. Lond. Ophthalmic Hosp., from typical case of conjunctivitis, 1921. 1921

1699. *22.* Isolated by Dr. P. Fildes, London Hospital, from case of muco-purulent conjunctivitis, 1923. 1923

***Lactobacillus pentoaceticus*** Fred, Peterson, and Davenport

947. *118-8.* Isolated by E. B. Fred, Dept. of Agricultural Botany and Agricultural Chemistry, University of Wisconsin, U.S.A. Used in the production of acetic acid from pentoses (xylose, &c.). (*J. Biol. Chem.*, 1919, **39**, 347, and 1920, **42**, 175.) 1921

***'Leather Bacillus'***

672. *Houston.* Isolated by Sir Alexander Houston from leather washer of water tap. (*12th Research Report, Met. Water Bd.*, 1916.) Closely related to *B. lactis aerogenes.* 1920

***Leishmania infantum***

1664. Dr. Nicolle, Pasteur Inst., Tunis. Isolated in Tunis from case of canine Leishmaniasis, 1911. 1923

***Leishmania donovani***

1662 A. London School of Tropical Medicine. Spleen puncture, case of kala-azar. 1924

Another strain.

***Leptomonas*** from gecko

1668. Dr. Nicolle, Pasteur Inst., Tunis. Isolated from blood of gecko (*Tarentola mauritanica*) at Tameto, S. Tunis, 1919. 1923

***Leptospira icterohaemorrhagiae*** Inado and Ido

*Dog strains*

2041. Fatal case of epizootic jaundice in dog. Dr. Okell, Wellcome Physiological Research Laboratories, 1924. (*Vet. J.*, 1925, **81**, 1.) 1925

*Human strain*

2040. *Baermann.* Human case of unclassified fever, Sumatra. Isolated by Dr. Baermann. (*Trop. Diseases Bull.*, 1924, **21**, 260.) 1923

*Rat strains*

2039. Dr. J. W. Wolff. *Rat F.* Isolated from *Mus decumanus* in Amsterdam. 1925

6 other strains from man to animals.

***Leptospira icteroides*** Noguchi

2087. Prof. Noguchi. *Le Blanc.* (*J. Trop. Med. and Hyg.*, 1925, **28**, 169) 1925

***Logos Yeast.*** See *Yeast* (*Logos*)

***Marpmann's Bacillus***

335. *Marpmann.* Acid-fast bacillus, isolated by Marpmann from urine. Old culture from Bayon's stock, 1912. 1920

***Meningococcus*** [*Neisseria intracellularis*]

668. Type I. Major Gordon Bell, R.A.M. College, Millbank. *Littledale.* Cerebro-spinal fluid. 1920

1233. Type II. Dr. M. H. Gordon. *Gabbitas.* Cerebro-spinal fluid. 1922

1247. Type III. Cent. Cerebro-spinal Fever Lab., London. *Chase.* Cerebro-spinal fluid. 1922

671. Type IV. Major Gordon Bell. *Hicks.* Cerebro-spinal fluid. 1920

22 other strains of various types.

***Metarrhizium anisopliae*** (Metsch.) Sor.
1660. Imp. Bur. of Mycol., Kew. Isolated from larvae of *Sitona* sp. 1923

***Micrococcus aurantiacus*** Cohn
1630. Dr. A. C. Thaysen, Holton Heath, Dorset. 1923

***Micrococcus badius*** Lehm. and Neum.
1627. Isolated from soil by Dr. A. C. Thaysen, Holton Heath, Dorset, 1921. 1923

***Micrococcus candicans*** Flügge
1657. Král, Vienna. 1923

***Micrococcus catarrhalis*** Pfeiffer [*Neisseria catarrhalis*]
1339. *Mott.* Isolated by Dr. M. H. Gordon from case of catarrh, 1921. 1922
3 other strains.

***Micrococcus concentricus*** Zimm.
1628. Dr. A. C. Thaysen, Holton Heath, Dorset. 1923

***Micrococcus crassus*** v. Lingelsheim
1736. *1477. C. S. F.* Isolated by Dr. Nabarro, Gt. Ormond St. Hospital for Sick Children, from cerebro-spinal fluid, 1923. Determined by Dr. E. E. Atkin, Lister Institute. 1924

***Micrococcus flavus*** (Flügge) Lehm. and Neum.
1629. Isolated from rabbit manure by Dr. A. C. Thaysen, Holton Heath, Dorset, 1921. 1923

***Micrococcus of ovine gangrenous mastitis***
1803. S. H. Gaiger, Animal Diseases Research Ass., Glasgow. From cases in Roxburghshire. 1924

***Micrococcus roseus*** (Bumm.) Lehm. and Neum. [*Rhodococcus roseus*]
1114. Isolated from soil by Dr. A. C. Thaysen, Holton Heath, Dorset, 1921. 1921
Another strain (No. 195).

***Micrococcus sulphureus*** Zimm.
1631. Isolated from milk by Dr. A. C. Thaysen, 1921. 1923

***Micrococcus tetragenus*** Koch and Gaffky [*Staphylococcus tetragenus*]
951. Dr. Houghton, Parke Davis Co., Detroit, U.S.A. *0584.* 1921

***Microspira agarliquefaciens*** Gray and Chalmers
1749. Isolated by P. H. H. Gray and C. H. Chalmers, Rothamsted Experimental Station, Harpenden. Has the unusual power of liquefying agar. (*Ann. Applied Biol.*, 1924, **9**, 324.) 1924

***Microsporum pubescens flavescens*** Kaps.
1489. Dr. Kapsenberg, Groningen, Holland. 1922

***Möller's 'Mist' Bacilli*** [*Mycobacteria stercusis*]
526. National Biological Museum, New York. 1920
527. No. 2. National Biological Museum, New York. 1920

***Monilia albicans*** (Robin) Zopf
714. *Craik.* Isolated by Dr. Craik, Ealing, from mouth of child suffering from thrush, 1920. 1920
Another strain (No. 1895).

***Monilia candida*** Bonord.
922. A. Chaston Chapman, F.R.S. *Chapman.* 1921

***Monilia kruzei*** Cast.
698. Prof. Castellani. Isolated, 1909. . . . . 1920
Another strain (No. 1225).

***Monilia macedoniensis*** Cast.
697. Prof. Castellani. Isolated 1917. . . . . 1920
Another strain (No. 1227).

***Monilia pinoyi*** Cast.
707. Prof. Castellani. Isolated 1910. . . . . 1920

***Monilia psilosis*** Ashford
1065. Dr. J. T. Duncan, London School of Trop. Med. *Panton.* Isolated from faeces of acute sprue case at Endsleigh Gardens Hospital. Agrees with description of *Parasaccharomyces ashfordi*, Anderson. 1921
4 other strains.

***Monilia tropicalis*** Cast.
696. Prof. Castellani. Isolated 1909. . . . . 1920

***Monilia variabilis*** Lindner
797. Isolated from dust of Underground Railway by Dr. Graham Forbes, L.C.C. (*J. Hygiene*, 1923, **22**, 123.) . . . 1921

***Monosporium acuminatum*** Bon. v. ***terrestre*** Sacc.
1446. Isolated from soil, Rothamsted Experimental Station, 1919. 1922

***Mucor alternans*** v. Tiegh.
1903. Central Laboratory, South Manchurian Railway. 1924

***Mucor erectus*** Bain.
1904. Central Laboratory, South Manchurian Railway. 1924

***Mucor hiemalis*** (+) Wehm.
2010. Botany Dept. Imperial Coll. of Science. 1925

***Mucor hiemalis*** (–) Wehm.
2011. Botany Dept. Imperial Coll. of Science. 1925

***Mucor javanicus*** Wehm.
1901. Central Laboratory, South Manchurian Railway. 1924

***Mucor lusitanicus*** Brüderlein
1121. Isolated from meat in cold storage by F. T. Brooks, Cambridge, 1919. (*Tr. Brit. Mycol. Soc.*, 1923, **8**, 113.) 1921

***Mucor mucedo*** Linn.
809. Prof. Harden. *Bread.* Mouldy bread. . . 1921
One other strain (No. 1120).

***Mucor plumbeus*** Bon.
1123. From F. T. Brooks, Cambridge, 1918. . . . 1921

***Mucor pusillus*** Lindt.
1902. Central Laboratory, South Manchurian Railway. . 1924

***Mucor racemosus*** Fres.
1122. Isolated from meat in cold storage by F. T. Brooks, Cambridge, 1919. (*Tr. Brit. Mycol. Soc.*, 1923, **8**, 113.) . 1921
2 other strains (Nos. 1211 and 1818).

***Mucor rouxii*** Wehm.
921. A. Chaston Chapman, F.R.S. *Chapman.* Found in Chinese yeast. 1921

***Mucor sphaerosporus*** Hagem
1126. Isolated from pear in gas store by F. T. Brooks, Cambridge, 1919. (*Tr. Brit. Mycol. Soc.*, 1923, **8**, 113.) 1921

***Mucor stolonifer.*** See *Rhizopus nigricans*

***Mucor spinosus*** v. Tiegh.
1821. Carlsberg Laboratorium. *166.* 1924

***Mycobacterium album*** Söhn.
1470. Dr. A. J. Kluyver, Delft. *Söhngen 336.* 1922

***Mycobacterium lacticola*** Söhn.
1472. Dr. A. J. Kluyver. 1922

***Mycobacterium luteum*** Söhn.
1469. Dr. A. J. Kluyver. *Söhngen 332.* 1922

***Mycobacterium phlei*** Söhn.
1471. Dr. A. J. Kluyver. *Söhngen 333.* 1922

***Mycobacterium rubrum*** Söhn.
1468. Dr. A. J. Kluyver. *Söhngen 335.* 1922

***Mycoderma arborescens*** Kufferoth
1849. L'Institut de Gand, Belgium. 1924

***Mycoderma bordetii*** Kufferoth
1848. Carlsberg Laboratorium. *1206.* Isolated from pitching yeast. 1924

***Mycoderma cerevisiae*** Desm. Hansen
819. Prof. Harden, Lister Inst. *Harden.* 1921

***Nadsonia fulvescens*** Syd.
1846. Yeast. Carlsberg Laboratorium. *1146.* (*Centralbl. f. Bakt.*, II, 1912, **34**, 241.) 1924

***Nectria diversispora*** Petch
1143. Isolated by Dr. A. S. Horne, Imp. Coll. of Science, from stem of *Hevea brasiliensis.* 1921

***Nectria ipomoeae*** Hals.
1795. Geo. W. Martin, University of Iowa, U.S.A. Stem rot of egg plant. 1924

***Nocardia caviae***
1934. Dr. Snijders, Amsterdam. *Noc. II.* Isolated in Sumatra, Dutch East Indies, from infected guinea-pigs. 1925

***Nocardia cuniculi***
1935. Dr. Snijders, Amsterdam. *Noc. I.* Isolated in Sumatra, Dutch East Indies, from infected rabbits. 1925

***Nocardia dissonviller***
800. *94 Underground.* Isolated by Dr. Graham Forbes, L.C.C., from dust of London Tube Railway, 1920. (*J. Hygiene*, 1923, **22**, 193.) 1920
6 other strains.

***Nocardia indica*** Kanth
1040. *Mycetoma.* Isolated by Col. Cornwall, I.M.S., Pasteur Inst. for S. India, from material from sinus in leg of mycetoma patient, 1921. 1921
1070. *Madura Foot.* Isolated by Dr. J. H. Harvey Pirie, South African Inst. of Medical Research, Johannesburg, from M'Sutu native suffering from Madura foot, 1921. (*Med. J. of S. Africa*, 1921, **17**, 6.) 1921

***Nocardia lutea***
576. Sir F. W. Andrewes. *Khartum.* Isolated by Dr. Christopherson. Eye disease, Khartum, 1918. 1920

***Oidium asteroides*** Cast.
709. Prof. Castellani. Isolated 1914. 1920
(For genus *Oidium* see Castellani and Chalmers, *Manual of Tropical Medicine*, 3rd Ed., 1919, p. 1093.)

***Oidium lactis*** Fres.
923. A. Chaston Chapman, F.R.S. *Chapman.* 1921

***Oidium lupuli*** Matthews and Lott
1825. Carlsberg Laboratorium. *188.* Isolated from hops. 1924

***Oidium rotundatum*** Cast.
701. Prof. Castellani. Isolated 1911. 1920

***Oospora fragrans*** var. ***minuta*** Berkh.
1742. Bainier Collection. *4719. 2.* 1924

***Oospora humi*** Berkh.
1743. Bainier Collection. *1419. 10.* 1924

***Paecilomyces*** (Bainier) sp.
1241. Isolated by Dr. J. Ségal at the Lister Inst. from guinea-pigs inoculated with typhus virus, 1922. (*J. Path. and Bact.*, 1923, **26**, 156.) 1922

***Parasaccharomyces ashfordi*** Anderson
1062. Dr. J. T. Duncan, London School of Trop. Med. Isolated from a sprue patient by Dr. B. K. Ashford in Porto Rico. (Anderson, *J. Inf. Dis.*, 1917, **21**, 341.) 1921

***Pasteurella*** Trevisan
948. *Mouse.* Isolated by Dr. W. W. C. Topley, Charing Cross Hosp., from lesions of mouse, mouse epizootic. 1921
1941. *Goat.* Isolated in 1924 by Dr. Hirst, Colombo, from pleural effusion of goat. 1925
1374. *Porcupine.* Isolated at Royal Zoological Society's Gardens, Regent's Park, by Dr. Nathaniel Lucas from South African Porcupine (*Hystrix africae-australis*), 1922. 1922
1898. *Rat Kangaroo.* Isolated at Royal Zoological Society's Gardens, Regent's Park, by Dr. Nathaniel Lucas from caseous lesions in lung of rat kangaroo (*Aepyprymnus rufescens*), 1924. 1924
See also *B. avisepticus*, *B. bovisepticus*, *B. ovisepticus*, *B. suisepticus*, *B. cuniculisepticus*.

***Penicillium album camemberti***
601. Liebefeld, Berne, Switzerland. *Thaysen.* 1920

***Penicillium avellaneum***
984. Thom and Church, Washington, D.C., U.S.A. *Washington 4010. 5.* 1921

***Penicillium brevicaule*** Saccardo
580. Thom and Church. *Washington 2.* Cheese. 1920
Another strain (No. 1362).
581. (Var. *album* Thom.) Thom and Church. Camembert cheese. 1920

***Penicillium camemberti*** Thom
582. Thom and Church. *Washington 5.* Found in Camembert cheese. 1920
583. (Var. *rogeri.*) Thom and Church. Found in Camembert, Brie, and Neufchâtel cheeses. 1920
Another strain (No. 1717) received as *P. caseicolum* Bain.

***Penicillium candidum*** Link
602. Liebefeld, Berne, Switzerland. *Thaysen.* 1920

***Penicillium caseicolum*** Bain. See *Penicillium camemberti var. rogeri*

***Penicillium chrysogenum*** Thom
589. Thom and Church. *Washington 26.* 1920

***Penicillium claviforme*** Bain.
1718. Bainier Collection. *441.* 1923

***Penicillium divaricatum*** Thom
590. Thom and Church. *Washington 34.* Mucilage bottle. 1920

***Penicillium duclauxi*** Delacroix
587. Thom and Church. *Washington 20.* 1920

***Penicillium elongatum*** Bain.
1719. Bainier Collection. *444.* 1923

***Penicillium expansum*** Link
593. Thom and Church. *Washington 4189.* Apple with coremiform rot. 1920
One other strain (No. 976).

***Penicillium glaucum*** Link
763. From mouldy cake, 1920. 1920

***Penicillium granulatum*** Bain.
1720. Bainier Collection. *446.* 1923

***Penicillium herquei*** Bain.
1721. Bainier Collection. *447.* 1923

***Penicillium lilacinum*** Thom
584. Thom and Church. *Washington 8.* Common in soil. 1920

***Penicillium luteum*** Zukal
585. Thom and Church. *Washington 11.* Common in soil. 1920
Another strain (No. 1828).

***Penicillium oxalicum*** Currie and Thom
983. Thom and Church. *Washington 103.* Type culture. 1921

***Penicillium patulum*** Bain.
1722. Bainier Collection. *454.* 1923

***Penicillium pinophilum*** Hedgcock
1151. Thom and Church. *Washington.* Type strain, from pine wood. 1921

***Penicillium purpurogenum*** Fleroff.
586. Král, Vienna. *17.* 1920

***Penicillium roqueforti*** Thom
588. Thom and Church. *Washington 18.* Characteristic of Roquefort cheese. 1920

***Penicillium roseum*** Link
1730. Bainier Collection. Recd. as *Gliocladium roseum* Bain. 1923

***Penicillium rugulosum*** Thom

592. Thom and Church. *Washington 46.* Isolated at Storrs, Conn., U.S.A. 1920

***Penicillium spinulosum*** Thom

591. Thom and Church. *Washington 45.* From a laboratory culture, Hanover, Germany. 1920

***Pestalozzia palmarum***

1299. Centraalstelle, Baarn. *10.* 1922

***Pestalozzia theae*** Sawada

1259. Isolated from tea by A. C. Tunstall, Indian Tea Association. 1922

***Phialophora verrucosa***

1776. Dept. of Path. and Bact., University of Toronto. *Case 323 San Paulo.* Cause of 'Mossy Foot' disease of the Amazon region. 1924

***Phoma alternariaceum*** Brooks and Searle

1135. Isolated from diseased tomato fruit by F. T. Brooks, Botany School, Cambridge, 1915. (Brooks and Searle, *Tr. Brit. Mycol. Soc.*, 1922, **7**, 173.) 1921

***Phoma betae*** Fr.

1950. Imp. Bureau of Mycology, Kew. Isolated and determined by C. H. Cunningham, New Zealand. 1925

***Phoma pomi*** Pass.

1798. *125.* Isolated by Mr. Cunningham, New Zealand, from spot on stored apple. 1924

***Photobacterium phosphorium***

1383. Prof. A. J. Kluyver, Delft, Holland. 1922

***Phyllosticta prunicola*** Sacc.

1444. W. J. Dowson, R.H.S. Gardens, Wisley. Causes leaf blotch and shot hole disease of peaches, &c. 1922

***Physalospora cydoniae*** Arm.

1799. Isolated from pear cankers by C. H. Cunningham, New Zealand. 1924

***Phytophthora fagi*** Hart.

1193. Centraalbureau voor Schimmelcultures. Isolated from diseased beech seedlings by Klebahn. 1922

***Phytophthora faberi*** Maubl

1751. Isolated from papaw stem by C. H. Gadd, Peradeniya, Ceylon. 1924

3 other strains.

(*Ann. Royal Botanic Gdns., Peradeniya*, 1924, **9**, 47.)

***Pichia alcoholophila*** Klöcker

481. Dr. A. Klöcker, Carlsberg Lab. *Carlsberg.* From soil, Denmark. 1920

***Pichia calliphorae*** Klöcker

483. Dr. A. Klöcker. *Carlsberg.* From a fly (*Calliphora erythrocephala*) found in a Carlsberg garden, 1900. (*Compt. rend. trav. du Lab. Carlsberg*, 1913, **10**, 216.) 1920

***Pichia farinosa*** Lindner-Hansen

901. A. Chaston Chapman, F.R.S. *Chapman.* The species was discovered in Danzig 'Jopen' beer, and has also been found by F. Sato in Japanese soya sauce. 1921

***Pichia membranaefaciens*** Hansen
479. Dr. A. Klöcker. 1920

***Pichia polymorpha*** Klöcker
480. Dr. A. Klöcker. *Carlsberg*. From soil, Denmark. (*Compt. rend. trav. du Lab. Carlsberg*, 1913, **10**, 215.) 1920

***Pichia suaveolens*** Klöcker
482. Dr. A. Klöcker. *Carlsberg*. From soil, Denmark, 1904. (*Compt. rend. trav. du Lab. Carlsberg*, 1913, **10**, 211.) 1920

***Pleospora pomorum*** Horne
1769. Dr. A. S. Horne, Imp. Coll. of Science. From apples. (*Ann. Applied Biol.*, 1920, **7**, 183.) 1924

***Pleurage verruculosis*** Jensen
1451. Rothamsted Experimental Station, Harpenden, 1919. *25*. From soil. 1922

***Pneumococcus*** [*Diplococcus pneumoniae*]
339. Type I. Rockefeller Inst. *F. 1692*. Blood, lobar pneumonia. 1920
991. Type I. Dr. F. Griffith. 1921
340. Type II. Rockefeller Inst. *II. 75*. Blood, lobar pneumonia. 1920
341. Type II. Rockefeller Inst. *F. 208. 2*. Sputum, lobar pneumonia. 1920
342. Type II a. Rockefeller Inst. *Jn. 98*. Maxillary antrum pus, 1915. 1920
344. Type III. Rockefeller Inst. *A. 66. 31*. Sputum, lobar pneumonia, 1913. 1920
1264. Type III. *L. 38*. Dr. F. Griffith. 1922
996. Type IV. Dr. F. Griffith. *B. 32*. A typical pneumococcus strain isolated from sputum through mouse. Pneumonia. 1921
12 other strains of various types.
739. *Guinea-pig*. Isolated by Dr. Schütze from heart blood of guinea-pig at Lister Inst., 1920. 1920
1608. *Parrot A*. Isolated by Dr. Nathl. Lucas. Epizootic at dealers among blue-fronted Amazon parrots (? *Chrysotis*), 1923. 1923
Another strain (No. 1609).

***Polyopeus aureus*** Horne
1761. Isolated from apples by Dr. A. S. Horne, Imp. Coll. of Science. (*Ann. Applied Biol.*, 1920, **7**, 183.) 1924

***Polyopeus pomi*** Horne
1760. Isolated from apples by Dr. A. S. Horne, Imp. Coll. of Science. *37*. (*Ann. Applied Biol.*, 1920, **7**, 183.) 1924

***Polyopeus purpureus*** Horne
1759. Isolated from apples by Dr. A. S. Horne, Imp. Coll. of Science. (*Ann. Applied Biol.*, 1920, **7**, 183.) 1924

***Polyspora lini*** Laff.
1004. R. Leslie Colett, F.I.C. *6004*. Isolated from diseased flax by H. A. Lafferty, Imp. Coll. of Science, Dublin. 1921
(*Scient. Proceed. Royal Dublin Soc.*, 1921, **26**, 248.)
Another strain (No. 1195).

***Pseudomonas barkeri***. See *B. barkeri*

***Pseudomonas campestris***. See *B. campestre*

***Pseudomonas* (*denitrifying*)**

933. *G. I. A. Rothamsted.* Isolated by H. G. Thornton from Barnfield soil, Rothamsted, 1921. Resembles *Bacillus New Jersey* (J. G. Lipman, *N. J. Agr. Stat. Rept.*, 1902, p. 183). 1921

***Pseudomonas hyacinthi.*** See *B. hyacinthi*

***Pseudomonas phaseoli.*** See *B. phaseoli*

***Pseudomonas proteamaculans.*** See *B. proteamaculans*

***Pseudomonas radicicola*** Beij [*Rhizobium radicicolum*]

928. H. G. Thornton, Rothamsted Experimental Station, Harpenden. *Soy Bean.* Nodule of soy bean, 1920. 1921
3 other strains.

***Pseudomonas tolaasi.*** See *B. tolaasi*

***Pseudosaccharomyces*** (Apiculate Yeasts)
(*Compt. rend. trav. du Lab. Carlsberg*, 1913, **10**, 285.)

***Pseudosaccharomyces africanus*** Klöck.

499. Dr. A. Klöcker. *Akbari 12.* Soil, Akbari, Algeria. 1920

***Pseudosaccharomyces antillarum*** Klöck.

490. Dr. A. Klöcker. *St. Thomas 208.* Soil, St. Thomas, W.I. 1920

***Pseudosaccharomyces apiculatus*** Reess

497. Dr. A. Klöcker. Soil in environs of Carlsberg. 1920
One other strain.

***Pseudosaccharomyces austriacus*** Klöck.

492. Dr. A. Klöcker. *Alps Autr.* Soil, Austrian Alps. 1920

***Pseudosaccharomyces corticis*** Klöck.

485. Dr. A. Klöcker. *B. 60.* Bark, lichen, and moss from trees planted in environs of Copenhagen. 1920

***Pseudosaccharomyces germanicus*** Klöck.

491. Dr. A. Klöcker. *Harz 3.* Soil, Harz Mountains. 1920

***Pseudosaccharomyces indicus*** Klöck.

487. Dr. A. Klöcker. *Himalaya.* Soil, Himalayas. 1920

***Pseudosaccharomyces javanicus*** Klöck.

498. Dr. A. Klöcker. *Java 104.* Soil, Java. 1920

***Pseudosaccharomyces jenseni***

494. Dr. A. Klöcker. *Java 403.* Soil, Java. 1920

***Pseudosaccharomyces lafari*** Klöck.

489. Dr. A. Klöcker. *Java 105.* Soil, Java. 1920

***Pseudosaccharomyces lindneri*** Klöck.

1816. Dr. Schmitt, Carlsberg Laboratorium. *Java 395.* Soil, Java. 1924

***Pseudosaccharomyces malaianus*** Klöck.

484. Dr. A. Klöcker. *Java 104 a.* Soil, Java. 1920

***Pseudosaccharomyces mülleri*** Klöck.

496. Dr. A. Klöcker. *Java 201.* Soil, Java. 1920

***Pseudosaccharomyces occidentalis*** Klöck.

486. Dr. A. Klöcker. *St. Croix.* Soil, St. Croix, W.I. 1920

***Pseudosaccharomyces santacruzensis*** Klöck.

493. Dr. A. Klöcker. *St. Croix 409.* Soil, St. Croix, W.I. 1920

***Pseudosaccharomyces willi*** Klöck.

488. Dr. A. Klöcker. *St. Thomas 193.* Soil, St. Thomas, W.I. 1920

***Pullularia nigrans*** Berkh.
1745. Bainier Collection. *1419. 3.* 1924

***Pullularia pullulans*** Berkh. See *Dematium pullulans*

***Pythium aphanidermatum*** (Eds.) Fitzp.
1882. Imp. Bureau of Mycology, Kew. Isolated from tobacco, Gold Coast, by H. A. Dade. 1924

***Rhizoctonia destruens*** Tassi
1175. L. S. Ajrekar, Poona Agric. Coll. From potato. 1921

***Rhizoctonia lamellifera*** Small
1949. Imp. Bureau of Mycology, Kew. Isolated and determined by W. Small, Kenya Colony, from *Eucalyptus* sp. 1925

***Rhizoctonia solani*** Kuhn.
1464. Isolated from golf green, Devonshire, by Miss K. Simpson, 1921. 1922

***Rhizopus japonicus*** Vuill
1905. Central Laboratory, South Manchurian Railway. 1924

***Rhizopus nigricans*** Ehrb.
956. Prof. A. K. Ling, Birmingham University. *Ling.* 1921

***Rhizopus oryzae*** Went. and Geer.
1907. Central Laboratory, South Manchurian Railway. 1924

***Rhizopus tonkinensis*** Vuill
1906. Central Laboratory, South Manchurian Railway. 1924

***Saaz Yeast.*** See *Yeast* (*Saaz*)

***Saccharomyces anomalus.*** See *Willia anomala*

***Saccharomyces apiculatus*** Hansen. See *Pseudosaccharomyces apiculatus* Reess.

***Saccharomyces brasiliensis*** Lindner
1808. Dr. Schmitt, Carlsberg Laboratorium. *98.* 1924

***Saccharomyces carlsbergensis*** Hansen
742. Dr. A. Klöcker, Carlsberg Lab. *Carlsberg.* (*Compt. rend. trav. du Lab. Carlsberg*, 1900, **5**, 1.) 1920

***Saccharomyces cerevisiae*** Hansen
466. Dr. A. Klöcker, Copenhagen. *Carlsberg.* 1920
381. Carlsberg Lab. *21.* Brewing yeast. 1920
815. Prof. Harden, Lister Inst. Baker's yeast. 1921

***Saccharomyces ellipsoideus*** Hansen. (Syn. *Saccharomyces ellipsoideus I*)
467. Dr. A. Klöcker. *Carlsberg.* 1920
One other strain (No. 1344).

***Saccharomyces ellipsoideus II.*** See *Saccharomyces turbidans*

***Saccharomyces exiguus*** Reess-Hansen
812. Prof. Harden, Lister Inst. *Harden.* 1921

***Saccharomyces farinosus.*** See *Pichia farinosa*

***Saccharomyces fragilis*** Jörgensen
905. A. Chaston Chapman, F.R.S. *Armstrong-Chapman.* Isolated from kefir by Jörgensen. (*Die Mikroorg. d. Gärungs-Industrie*, 1918, 276.) 1921

***Saccharomyces intermedius*** Hansen
469. Dr. A. Klöcker. *Carlsberg.* 1921

***Saccharomyces hansenii*** Zopf
1681. Dr. A. Klöcker, Carlsberg Laboratorium. 1923

***Saccharomyces ilicis*** Grönlund
1809. Carlsberg Laboratorium. Discovered on the fruit of *Ilex aquifolium.* Bottom yeast. *105.* 1924

***Saccharomyces marxianus*** Hansen
472. Dr. A. Klöcker. *Carlsberg.* 1920

***Saccharomyces monacensis*** Hansen
743. Dr. A. Klöcker. *Carlsberg.* (*Compt. rend. trav. du Lab. Carlsberg,* 1900, **5**, 1.) 1920

***Saccharomyces pastorianus*** Hansen. (Syn. *Saccharomyces pastorianus I*)
468. Dr. A. Klöcker. *Carlsberg.* 1920

***Saccharomyces pastorianus II.*** See *Saccharomyces intermedius*

***Saccharomyces pastorianus III.*** See *S. validus*

***Saccharomyces pyriformis*** Ward.
1071. From 'Californian bees'. Source unknown. 1921

***Saccharomyces saké*** Yabe
1015. Prof. Ling,F .I.C., Birmingham. *Ling.* Isolated from saké. 1921

***Saccharomyces thermantitonum*** Johnson, 1905
790. Jörgensen. *Jörgensen.* (*Biochem. Ztschr.*, 1919, **97**, 156.) 1921
791. Institut f. Gärungsgewerbe, Berlin. *Berlin.* (*Biochem. Ztschr.*, 1920, **102**, 258.) 1920
792. A. Chaston Chapman, F.R.S. *Chapman.* Believed to be descended from Johnson's original strain, 1905. 1921

***Saccharomyces turbidans*** Hansen
471. Dr. A. Klöcker. *Carlsberg.* 1920

***Saccharomyces validus*** Hansen
470. Dr. A. Klöcker. *Carlsberg.* 1920

***Saccharomyces.*** See also *Yeast*

***Saccharomycodes ludwigii*** Hansen
473. Dr. A. Klöcker. 1920

***Saccharomycopsis capsularis*** Schionn.
814. Prof. Harden, Lister Inst. *Harden.* 1920

***Salmonella***
Serological type Aertrycke. See *B. anatum, B. psittacosis, Bacillus of Schweinepest, B. suipestifer* (Nos. 32, 74, 106, 115, 178, 959), *B. suis* (No. 425), *Bacillus of swine typhus* (Nos. 354 and 355).
Serological type American Hog Cholera. See *B. suipestifer* (Nos. 179, 356, 1587, 1588, 1590, 1591).
Serological type Binns. See *B. suipestifer* (Nos. 73 and 175).
Serological type Derby. See *B. suipestifer* (No. 1729).
Serological type Eastern Hog Cholera. See *B. paratyphosus C.* (Nos. 90, 93, 96, 99, 101, and 777).
Serological type English Hog Cholera. See *B. paratyphosus C.* (Nos. 309, 749, 1249, 1710, 1713, 1727, and 1728) and *B. suipestifer* (Nos. 91, 1771, 1772, and 1773).

***Salmonella*** (*continued*)
Serological type—Hog Cholera. See *B. suipestifer* (Nos. 347, 349, 350, 352, 356), *B. suis* (No. 426).
Serological type L. See *B. suipestifer* (No. 1946).
Serological type Newport. See *B. suipestifer* (Nos. 129, 726, and 1857).
Serological type Reading. See *B. suipestifer* (Nos. 72 and 1878).
Serological type Schottmüller. See *B. paratyphosus B.*
Serological type Stanley. See *B. suipestifer* (Nos. 92 and 1705).

***Sarcina aurantiaca*** Flügge
952. Dr. Houghton, Park Davis Co., Detroit, U.S.A. *01346.* 1921

***Sarcina lutea*** Flügge
611. Dr. A. Thaysen, Holton Heath, Dorset. *Thaysen.* 1920

***Schizoparme straminea*** Shear
1323. *116.* Isolated by Dr. C. L. Shear, Washington, D.C., from strawberry. 1922

***Schizosaccharomyces mellacei*** Jörg.
1014. Prof. Ling, F.I.C., Birmingham. *Ling.* 1921

***Schizosaccharomyces octosporus*** Beij.
382. Carlsberg Lab. *13.* 1920

***Schizosaccharomyces pombé*** Lindner
902. A. Chaston Chapman, F.R.S. *Chapman.* The species was discovered by Saar in 'pombé' (African millet beer). 1921

***Schwanniomyces occidentalis*** Klöcker
476. Dr. A. Klöcker. *Carlsberg.* From soil, St. Thomas. (*Comp. Rend. trav. du Lab. Carlsberg*, 1909, **7**, 273.) 1920

***Sclerotinia cinerea*** Schroet. forma mali.
1238. *XIV.* Isolated by Dr. H. Wormald, Wye, from pustule on apple spur. (*Ann. Applied Biol.*, 1917, **3**, 178.) 1922

***Sclerotinia cinerea*** Schroet. forma pruni
1239. Isolated by Dr. H. Wormald from mummified plum. (*Ann. of Botany*, 1921, **35**, 125.) 1922

***Sclerotinia fructigena*** (Pers.) Schroet.
1072. Mrs. N. L. Alcock, Ministry of Agriculture, Harpenden. 1921

***Sclerotinia sclerotiorum*** (Lib.) Bref.
1074. Mrs. N. L. Alcock, Ministry of Agriculture, Harpenden. 1921

***Sclerotinia trifoliorum*** Erikss.
1593. Isolated by W. Buddin, Reading. 1923

***Sclerotium cepivorum*** Berkh.
1076. Mrs. N. L. Alcock, Ministry of Agriculture, Harpenden. Isolated from diseased onions. 1921

***Sclerotium rolfsii*** Sacc.
1262. Isolated by L. S. Ajrekar, Pusa, India, from potato. 1922

***Sclerotium tuliparum*** Kleb.
1497. Isolated by Miss E. M. Wakefield from diseased tulips at Kew. 1922

***Septoria lycopersica*** Speg.
1891. Dept. of Agric., Canada. Leaf spot of tomato. 1924

***Spicaria javanica*** Bally
1860. Isolated from scale insect (*Lecanium viride*) by T. Petch, Peradeniya, Ceylon. 1924

***Spirillum rubrum*** von Esmarch [*Rhodospirillum rubrum*]
953. Dr. Houghton, Parke Davis Co., Detroit, U.S.A. *01348.* 1921

***Spirochaeta cytophaga*** Hutch.
1750. P. H. H. Gray. Cellulose-decomposing organism isolated from soil, Rothamsted. (*J. Agric. Sc.*, 1919, **9**, 143.) 1924

***Sporotrichum carnis*** Brooks and Hansford.
1672. Isolated by Brooks and Hansford from meat in cold storage, 1918. (*Brit. Mycol. Soc. Tr.*, 1923, **8**, 113.) 1923

***Sporotrichum schenckii***
406. Hektoen. Original *Schenck-Hektoen.* Human case of sporotrichosis, 1900. (*Johns Hopkins Hosp. Bull.*, 1898, **9**, 286.) 1920

***Sporotrichum sp.*** from horse
879. *17.* Isolated by Dr. K. F. Meyer from pus from a case of equine sporotrichosis in Pennsylvania, 1913. 1921

***Staphylococcus cereus flavus*** Passet [*Micrococcus cereus*]
193. Lister Inst. *L.I.P.M.* 1920

***Staphylococcus cremoris-viscosi***
963. Isolated by B. W. Hammer and W. A. Cordes, Dairy Dept., Iowa State Coll., U.S.A., from an outbreak of ropy milk, 1920. (*J. Dairy Sc.*, 1920, **3**, 291.) 1921

***Staphylococcus epidermidis albus*** [*Staphylococcus epidermidis*]
1400. Dr. Hine, St. Bartholomew's Hosp. Postoperative wound. 1921

***Staphylococcus pyogenes***
2067. (*aureus.*) *Titi.* Isolated by P. A. Buxton from filarial abscess, Samoa, 1925. 1925
1388. *Type I.* Dr. Hine. Septic sore on lip. (*Lancet.* 1922, ii. 1380.) 1922
1393. *Type II.* Dr. Hine. Tonsil. 1922
36. (*albus.*) Lister Inst. *Galloway.* Case of vaginitis, 1911. 1920
1392. *Type I.* Dr. Hine. Blood culture carbuncle. 1922
182. (*citreus.*) Lister Inst. *Moss.* Pimple on throat, 1915. 1920
1390. *Type I.* Dr. Hine. 1922

***Staphylococcus salivarius***
189. Lister Inst. *Rayner.* 1920

***Stemphylium ? sp.***
1005. *Cotton* (*France*). Isolated by Miss Lorrain Smith, F.L.S., Natural History Museum, S. Kensington, from rotting cotton canvas from France. 1921
1006. *Cotton* (*Dover*). Isolated by Miss Lorrain Smith, F.L.S., from rotting cotton canvas from Dover. 1921

***Stereum purpureum*** Fr.
1183. S. P. Wiltshire, Long Ashton, Bristol. *M. 146.* Silver leaf of plum, 1920. 1922

***Sterigmatocystis flavipes*** Bainier
1716. Bainier Collection. *402.* 1923

***Streptococcus acidi lactici*** Grotenfeldt [*Streptococcus lactis*]
662. Dr. A. Thaysen, Holton Heath, Dorset. *Thaysen.* Milk. 1920

***Streptococcus in animals***

2016. Dr. R. A. O'Brien. From strangles lesion in a horse. 1925

647. *III Furness.* Isolated at R. A. V. Coll. from pus from knee-joint of foal with joint ill, 1919. 1920

648. *Cow Wardlaw.* Isolated by Capt. Edwards from contagious mastitis of cow, 1918. 1920

4 other strains isolated from lesions of cows, cats, and dogs.

***Streptococcus from Epidemic Poliomyelitis***

1942. Dr. E. C. Rosenow. *No. 98. 16.* (*J. Infect. Dis.*, 1918, **22**, 313.) 1925

Another strain (No. 1943.)

***Streptococcus erysipelatis***

226. Lister Inst. *L.I.P.M.* 1920

***Streptococcus* (*faecal*)**

370. (*S. faecalis.*) Capt. S. R. Douglas. *Stubbs IV* (*Elstree 35*). 1920

775. (*Enterococcus.*) Pasteur Inst., Paris. *Tissier.* 1920

5 other strains.

***Streptococcus from Scarlet Fever***

1892. Dr. Dochez. Used for Dick Test in Scarlet Fever. 1924 (*J. Am. M. Ass.*, 1924, **82**, 265.)

***Streptococcus haemolyticus***

*Strains received from Dr. Avery, Rockefeller Inst.* (*J. Exper. M.*, 1919, **30**, 179.)

325. Type S. 3. *3. 22.* Broncho-pneumonic lung, Texas, U.S.A., 1918. 1920

326. Type S. 23. *23. 20.* Throat, lobar pneumonia, Texas, 1918. 1920

327. Type S. 60. *60. 10.* Throat, measles, Texas, 1918. 1920

328. Type S. 84. *84. 18.* Pleural fluid, broncho-pneumonia, Texas, 1918. 1920

6 other strains.

***Streptococcus* (*Havens' Groups*)**

*Received from Dr. Havens, Iowa City, U.S.A.* (*J. Infect. Dis.*, 1919, **25**, 315.)

461. Group 1. *No. 2.* Sputum, broncho-pneumonia, 1918. 1920

462. Group 2. *No. 3.* Acute bronchitis, 1918. 1920

464. Group 3. *No. 5.* Broncho-pneumonia, 1919. 1920

One other strain of Group 2 (No. 463) and one other strain of Group 3 (No. 465).

***Streptococcus ignavus***

442. Dr. Barnes, California, U.S.A. *Barnes 11.* Sputum. (*J. Infect. Dis.*, 1919, **25**, 47.) 1920

***Streptococcus infrequens***

439. Dr. Barnes. *Barnes 4.* Tonsil. (*J. Infect. Dis.*, 1919, **25**, 47.) 1920

Another strain (No. 647).

***Streptococcus rheumaticus*** Allen

304. Dr. Allen. *Allen.* Blood, acute rheumatism, and endocarditis, 1910. 1920

***Streptococcus rheumaticus*** Beattie

227. Prof. Beattie. *Beattie.* 1920

***Streptococcus lacticus***
1551. Mr. G. W. Clarke, Messrs. Aplin and Barrett. 1923

***Streptococcus mutans*** Clarke
1880. Isolated from carious tooth by Dr. J. Killian Clarke, St. Mary's Hosp. 1923. (*Brit. J. Exper. Path.*, 1924, **5**, 141.) 1924

***Streptococcus salivarius***
445. Dr. Barnes. *Barnes 34.* Tonsillitis. (*J. Infect. Dis.*, 1919, **25**, 47.) 1920

***Streptococcus subacidus***
437. Dr. Barnes. *Barnes 1.* Blood. (*J. Infect. Dis.*, 1919, **25**, 47.) 1920

***Streptococcus viridans***
1080. Van Sickle. Isolated by Miss Cowan, Toronto University, from tonsil of child with recurring septic throat, 1919. 1921

***Streptothrix*** Cohn
*Strains from Streptotrichosis in Man*
450. Dr. Gibson, Oxford. *Gibson.* Isolated 1914. 1920
146. Lister Inst. *C.S.F.* Cerebro-spinal fluid, 1920. 1920
658. Lister Inst. *Birt-Leishman.* (*J. Hyg.*, 1902, **2**, 120.) 1920
*Strains from Streptotrichosis in Animals*
630. *24 Foal Blackwell.* Isolated by Capt. Edwards, R.A.V.C., Royal Vet. Coll., London, in pure culture from hock joint of foal. 1920

***Stysanus stemonites*** (Pers.) Corda
1129. F. T. Brooks, Botany School, Cambridge, 1921. 1921

***Syncephalastrum racemosum*** Cohn
1794. Geo. W. Martin, University of Iowa, U.S.A. 1924

***Thamnidium chaetocladioides*** Bref.
1128. Isolated from meat in cold storage by F. T. Brooks, Cambridge, 1918. 1921

***Thamnidium elegans*** Link
1127. Isolated from meat in cold storage by F. T. Brooks, Cambridge, 1918. 1921

***Thielavia basicola*** Zopf
1889. Dept. of Agriculture, Canada. *2014.* 1924

***Thielaviopsis ethaceticus*** Went
1223. Isolated from interior of coconut by Dr. H. G. Derx, Oliefabriek, Delft, Holland, 1921. 1922

***Thielaviopsis paradoxa*** (de Seynes) von Höhn
1260. Imp. Bureau of Mycology, Kew. Isolated from sugar cane, Gold Coast. 1922

***Timothy Grass Bacillus.*** See *B. phlei*

***Torula*** Hansen
886. Dr. K. F. Meyer. *2.* Isolated by Stoddart and Cutler in Boston, Mass., from human case of torula infection. (*Monog. Rockefeller Inst. M. Research*, 1916, **6**.) 1921
885. *1.* Isolated by Dr. K. F. Meyer from nasal tumour of a horse in Philadelphia, 1912. 1921
1842. Carlsberg Laboratorium. *1136.* Isolated from wound in hand by Dr. Rasch. 1924
1843. Carlsberg Laboratorium. *1137.* Isolated at Rigshospitalet from urinary bladder. 1924

***Torula* (*black*)**
908. A. Chaston Chapman, F.R.S. *Chapman.* 1921

***Torula botryoides*** Brooks and Hansford
1671. Isolated by Brooks and Hansford from fish, &c, in cold storage, 1918. 1923

***Torula convoluta*** Harz
1134. Isolated from old potato tuber by F. T. Brooks, Cambridge, 1918. 1921

***Torula cremoris*** Hammer and Cordes
1302. Isolated by B. W. Hammer and W. A. Cordes, Iowa Agricultural Experiment Sta., U.S.A., from 'yeasty' or 'foamy' fermentation of cream. (*Iowa Agr. Exp. Sta. Bull.*, 1920, **61**, 24 pp.) 1922

***Torula fuliginea*** Berkh.
1746. Bainier Collection. *1419.8* 1924

***Torula histolytica*** Freeman and Weidman
1492. Isolated by Drs. Freeman and Weidman, Univ. of Pennsylvania from case of cerebral blastomycosis. (*Arch. Neurol. and Psych.*, 1923, **9**, 569.) 1922
One other strain (No. 1864).

***Torula layrentii*** Kufferoth
1847. Carlsberg Laboratorium. 1924

***Torula* (*red*)**
820. (*Torula rosea.*) Prof. Harden, Lister Inst. *Harden.* 1921
241 A. (Pink Torula.) Dr. S. G. Paine, Imperial Coll. of Science, S. Kensington. *Paine.* 1920
907. (Red Torula.) A. Chaston Chapman, F.R.S. *Chapman.* 1921

***Torula sphaerica*** Hammer and Cordes
1303. Isolated by B. W. Hammer and W. A. Cordes from 'yeasty' or 'foamy' fermentation of cheese. (*Iowa Agr. Exper. Sta. Bull.*, 1920, **61**, 24 pp.) 1922

***Trachysphaera fructigena*** Tab. and Bunt.
1687. Isolated by R. H. Bunting from cacao pod, Gold Coast. 1923

***Trichoderma koningii*** Oud.
1452. *13B88.* Isolated from soil at Rothamsted Experimental Station, Harpenden, 1920. 1922

***Trichophyton balcaneum*** Cast.
704. Prof. Castellani. Isolated 1915. 1920

***Trichophyton from bull***
1410. Isolated by Dr. H. Magnusson, Veterinary Inst., Malmo, Sweden, from a bull, 1922. 1922

***Trichophyton from horse***
1408. Isolated by Dr. H. Magnusson, Veterinary Inst., Malmo, Sweden, from horse, 1922. 1922

***Trypanosoma brucei*** Plimmer and Bradford.
2041. Nagana. Natl. Inst. of Med. Research, Hampstead. 1925

***Trypanosoma equiperdum*** Doflein
18 A. Pasteur Inst., Paris. *Algeria.* Algerian strain. 1921

***Trypanosoma rhodesiense*** Stephens and Fantham

1910. Human case of trypanosomiasis. Isolated at London School of Tropical Medicine, 1923. 1925

***Trypanosoma gambiense*** Dutton

1909. Human case of trypanosomiasis. Isolated at London School of Tropical Medicine, 1921. 1925

***Trypanosome du crapaud***

1669. Dr. C. Nicolle, Inst. Pasteur de Tunis. *Buf.* Isolated from blood of toad (*Bufo mauritanicus*). 1923

***Tyrothrix tenuis*** Duclaux

1116. A. Chaston Chapman, F.R.S. 1921

***Venturia inaequalis*** Aderh.

1181. S. P. Wiltshire, Long Ashton, Bristol. *M.111.* Isolated from apple leaves, 1919. 1922

***Venturia pirina*** Aderh.

1180. S. P. Wiltshire, Long Ashton, Bristol. *M.115.* Isolated from diseased pears, 1919. 1922

***Vibrio cholerae*** [*Vibrio comma*]

21. *Singapore.* Case from Straits Settlements. 1920
17. Dr. J. Freeman, St. Mary's Hosp. *Freeman 31.* Case of mild cholera in Russia, 1914. 1920
22. *Kedah 91.* Case from Straits Settlements. 1920
27. *Pfeiffer 27.* Case from Petrograd. 1920

12 other strains.

***Vibrio El Tor***

307. Dr. Crendiropoulo. *No. 4.* Isolated by Gotschlich from intestine of dysenteric patient at El Tor, 1905. (*Ztschr. f. Hyg. u. Infektionskrankh.*, 1906, **53**, 281.) 1920
55. Dr. Crendiropoulo. *A.* 1920
56. Král, Prague. *V.* 1920

2 other strains of 'El Tor' Vibrios (Nos. 57 and 58) which do not agglutinate with cholera serum (see *Ztschr. f. Hyg. u. Infektionskrankh.*, 1906, **53**, 281).

***Vibrio fetus*** Theobald Smith

1896. *997.* Isolated by Prof. Theobald Smith. (*J. Exper. M.*, 1919, **30**, 299.) 1924

***Vibrio Finckler-Prior*** [*Vibrio proteus*]

774. King's College, London. 1920

***Vibrio metchnikovi*** Gamaleia

262. Lister Inst. Originally isolated by Gamaleia from disease of fowls. 1920

***Vibrio paracholerae***

30. (*V. paracholerae* Martin No. 1.) Lt.-Col. Martin. Stool of convalescent patient, Montazah, 1916. 1920
558. (*V. paracholerae A* Mackie and Storer, *J. Roy. Army Med. Corps*, 1918, **31**, 161). Stool from choleraic case, Egypt, 1916. 1920
559. (*V. paracholerae B* Mackie and Storer.) Source as in No. 558. 1920
560. (*Vibrio K* Mackie.) Prof. Mackie. Choleraic case in Egypt, 1917. 1920
561. (*Vibrio Belah* Mackie.) Source as in No. 560. 1920

***Vibrio paracholerae*** (*continued*)

562. (*Vibrio Forrest* Mackie.) Source as in No. 560. 1920

261. (*Vibrio Nasik.*) Lister Inst. Isolated by Dr. Simond from a case of typical cholera, Nasik, India, 1903. 1920

***Vibrio percolans*** Mudd and Warren

1937. Filter-passing vibrio isolated from hay infusion filtrate by Dr. Stuart Mudd and Dr. Shields Warren, Dept. of Bact., Harvard University, 1921. (*J. Bact.*, 1923, **8**, 447.) 1924

***Vibrio*** resembling *V. cholerae*

719. Col. Liston. *Liston 128.* Water, Bombay. 1920

17 strains besides this and others under special names.

See also *Spirillum rubrum.*

***Vibrion septique*** Pasteur and Joubert [*Clostridium oedematis-maligni*]

548. Type I. Miss M. Robertson. *Brissons.* Isolated by Capt. Henry from case of gas gangrene. 1920

282. Type II. Miss M. Robertson. *Bedford.* Amoebic abscess of brain. 1920

284. Type III. Miss M. Robertson. *George A. 2.* Case of gas gangrene developing upon surgical treatment of a healed wound. 1920

286. Type 'Jerral'. Capt. Armitage. *Jerral.* Septic wound without gas gangrene. 1920

One other strain (No. 547) of Type I: 3 other strains of Type II: 4 other strains of Type III.

***Vibriothrix zeylanica*** Cast.

713. Isolated in 1909 by Prof. Aldo Castellani, Colombo, Ceylon. 1920

***Wardomyces anomala*** Brooks and Hansford

1670. Isolated by Brooks and Hansford from rabbits in cold storage, 1918. (*Brit. Mycol. Soc. Tr.*, 1923, **8**, 113.) 1923

***Willia anomala*** Hansen

474. Dr. A. Klöcker, Carlsberg Lab. *Carlsberg.* 1920

Another strain (No. 474).

***Willia belgica*** Lindn.

1546. Recd. from A. Chaston Chapman, F.R.S., as *Willia anomala* var. *Belgica.* 1923

***Willia saturnus*** Klöcker

475. Dr. A. Klöcker. *Carlsberg.* 1920

Another strain (No. 1834).

***Yeast*** (Cider)

1879. Dr. Durham, Hereford. Isolated from Strawberry Norman Apple. 1907. 1924

***Yeast*** (***Frohberg***)

903. A. Chaston Chapman, F.R.S. *Chapman.* Isolated by Lindner from yeast from Frohberg's Brewery at Grimma, Saxony. 1921

***Yeast*** (***Johannisberg II***) Wortmann

1806. Carlsberg Laboratorium. *76.* (*Landw. Jahrbücher*, 1892, **21**, and 1894, **23**.) 1924

***Yeast*** (***Kefir***) Hansen

904. A. Chaston Chapman, F.R.S. *Chapman.* 1921

***Yeast*** (***Lactose-fermenting***)

607. Dr. A. Thaysen, Holton Heath, Dorset. *Thaysen.* St. Ivel cheese. 1920

***Yeast* (*Logos*)**
909. *Ling.* Isolated previous to 1895 by H. van Laer and Denamur from pitching yeast used at Logos & Co.'s Brewery, Rio de Janeiro, Origin unknown, probably sugar-cane. Received by Dr. Raistrick from Prof. Ling, 1920. (*Moniteur scient.*, 1895, July, 499.) 1921

***Yeast* (*Mahua*)**
1639. Isolated by Prof. G. J. Fowler, Indian Inst. of Science, Bangalore. 1923

***Yeast* (*Mineral 'Futterhefe'*)**
1467. Dr. Ling, Birmingham University. Originally obtained from Dr. Lindner, Berlin. Used by Germans in Great War for production of cheap protein from molasses, &c. 1922

***Yeast* (*Pink*)**
1346. Miss Church, Washington, D.C. Isolated by Dr. Edwin LeFevre from canned ripe olives. 1922

***Yeast* (*Rasse XII*)**
2031. Inst. für Gärungsgewerbe, Berlin, through Dr C. G. L. Wolf, Cambridge. Used in investigations of fermentable sugar in blood. 1925

***Yeast* (*Saaz*)**
906. A. Chaston Chapman, F.R.S. *Chapman.* Isolated by Lindner at Institut für Gärungsgewerbe, Berlin, from pitching yeast used in the municipal brewery at Saaz, Bohemia. 1921

***Yeast* (*Sternberg '675'*)**
608. Dr. A. Thaysen. *Thaysen.* Used in U.S.A. for manufacture of glycerine. 1920

***Yeasts, apiculate.*** See *Pseudosaccharomyces*

***Zopfius zenkeri.*** See *B. proteus zenkeri*

***Zygosaccharomyces barkeri*** Sacc. and Syd.
813. Prof. Harden, Lister Inst. *Harden.* 1921
Another strain (No. 1778).

***Zygosaccharomyces bisporus*** Anderson
2047. Central Laboratory, South Manchurian Railway. Originally isolated by H. W. Anderson from human faeces. (*J. Infect. Dis.*, 1917, **21**, 341.) 1924

# PART II. LIST OF SUBJECTS

## WITH REFERENCES TO THE RELATED ORGANISMS

ABORTION in cattle
*B. abortus*
*Vibrio fetus*
—— in horses
*B. abortivo-equinus*
—— in pigs
*B. abortus*
ACETIC ACID, organism used in manufacture of, from pentoses
*Lactobacillus pentoaceticus*
*see also* Vinegar
ACETONE, organism used in manufacture of
*B. butylicus*
ACID-FAST BACILLI
Bacilli from butter
Bacilli associated with leprous lesions
*B. johne*
*B. phlei*
*B. smegmatis*
Marpmann's bacillus
Möller's 'Mist' bacilli
*see also* Tuberculosis
ACNE
*B. acnes*
ACTINOMYCOSIS in animals
*Actinomyces caprae*
*Nocardia caviae*
*Nocardia cuniculi*
—— in man
*Actinomyces bovis*
*Actinomyces* (Nos. 434 and 600)
*Nocardia lutea*
*see also* Madura Foot and Streptotrichosis
AIR: *see* Soil, Air, Water, &c., organisms from
AMPHIBIA, diseases of
*B. tuberculosis.* Cold-blooded Type. Paradoxical frog
*Trypanosome du crapaud*
ANAEROBES, pathogenic: *see* Botulism, Gas gangrene, Rauschbrand, Tetanus

ANTHRAX
*B. anthracis*
APPLE, diseases of
*Alternaria grossularieae*
*B. amylovorus.* Fire Blight
*Cephalothecium roseum.* Pink Rot
*Coniothecium chromatosporum*
*Eidamia viridescens*
*Fusarium mali*
*Phoma pomi.* Apple Spot
*Pleospora pomorum*
*Polyopeus aureus*
*Polyopeus pomi*
*Polyopeus purpureus*
*Sclerotinia cinerea.* Apple Pustule
*Sclerotinia fructigena.* Brown Rot
*Sclerotium rolfsii*
*Venturia inaequalis.* Scab

BARLEY, disease of
*Gibberella saubinetii.* Scab
BEAN, diseases of
*B. phaseoli.* Bacterial Blight
*Colletotrichum lindemuthianum.* Anthracnose
BEECH, disease of
*Phytophthora fagi*
BEET, diseases of
*B. aptatum.* Bacterial Leaf Spot
*B. beticolum.* Tuberculosis
*Phoma betae.* Phoma Crown Rot
BIRDS, diseases of
*Aspergillus fumigatus.* Aspergillosis in white egret, penguin, pigeon, black swan, golden eagle, water hen, flamingo, and owl
*B. anatum.* Epizootic of 'Keel' in ducks. Syn. *Salmonella*, type Aertrycke
*B. avisepticus.* Fowl Cholera. *See* Septicaemia, haemorrhagic

Birds, diseases of (*cont.*)
*B. canariense.* Septicaemia in canary and turkey
*B. gallinarum.* Fowl Typhoid. Syn. *B. sanguinarium*, *B. phasianicida*, and *B. jeffersoni*
*B. psittacosis.* Parrot epizootic. Syn. *Salmonella*, type Aertrycke
*B. pullorum.* Bacillary White Diarrhoea in chicks
*B. rettgeri.* Fowl disease
*B. tuberculosis.* Avian Type. Black-winged grackle
*Pneumococcus.* Parrot epizootic
*Vibrio metchnikovi*
Blastomycosis in animals
*Torula* (No. 885)
—— in man
*Blastomyces* (Nos. 271, 272, 1641, and 1642)
*Torula* (Nos. 886, 1842, and 1843)
*Torula histolytica*
Botulism
*B. botulinus*
Bread, ropiness in
*B. mesentericus panis viscosi*
*B. mesentericus* (Jordan Lloyd's types)
Butter, acid-fast bacilli from
Bacilli from butter
Butyl alcohol, organism used in manufacture of
*B. butylicus*

Cabbage, diseases of
*B. campestre.* Black Rot
*B. carotovorus.* Soft Rot
Cacao, diseases of
*Phytophthora faberi.* Black Rot
*Trachysphaera fructigena*
Calla, disease of
*B. aroideae.* Soft Rot
Canna, disease of
*B. cannae.* Bud Rot
Canvas rot, organisms associated with
*Alternaria* ? sp.
*Botrytis* ? sp.
*Diplodiella* ? sp.
*Stemphylium* ? sp.
Carnation, diseases of
*Fusarium dianthi.* Collar Rot
*Heterosporium echinulatum.* Leaf Mould
Carrot, disease of
*B. carotovorus.* Soft Rot
Cattle, diseases of
*Actinomyces bovis*
*B. abortus*
*B. anthracis*
*B. bovisepticus.* *See* Septicaemia, haemorrhagic
*B. chauvoei*
*B. johne*
*B. paracoli.* Syn. *B. enteritidis* Gärtner
*B. suipestifer.* Syn. *Salmonella*, type Aertrycke
*B. tuberculosis.* Bovine Type
*Streptococcus.* Contagious Mastitis (No. 648)
*Trichophyton* from bull (No. 1410)
*Trypanosoma brucei* 'Nagana'
*Vibrio fetus*
Cellulose decomposing organisms
*B. rossicum*
*Microspira agarliquefaciens*
*Spirochaeta cytophaga*
Cerebro-spinal meningitis
*Meningococcus*
*Micrococcus crassus*
Cheese, fungi of
*Penicillium album camemberti*
*P. brevicaule*
*P. camemberti*
*P. camemberti* var. *rogeri*
*P. caseicolum*
*P. roqueforti*
micro-organisms of
*B. güntheri*
Emmentaler Coccus
*Tyrothrix tenuis*
Yeast (lactose-fermenting) No. 607
Chestnut, disease of
*Acrospeira mirabilis*
Cholera
*Vibrio cholerae*
*V. El Tor*
*see also* Paracholera
Chrysanthemum, disease of
*B. tumefaciens.* Crown Gall
Citrus, disease of
*Diplodia natalensis.* 'Die-back'
Clover, diseases of
*B. trifoliorum*
*Sclerotinia trifoliorum.* Stem Rot

Coccidioidal granuloma
*Coccidioides immitis*
Coconut Palm, disease of
*Thielaviopsis ethaceticus*. Stem Bleeding
Coliform types from various sources
*B. acidi lactici*
*B. cloacae*
*B. coli anaerogenes*
*B. coli communis*
*B. coli mutabile*
Bacillus (coliform)
*B. communior*
*B. lactis aerogenes*
*B. neapolitanus*
*B. ozaenae*
*B. putrificus coli*
Leather bacillus
Conjunctivitis
Koch-Weeks' bacillus
*B. Morax-Axenfeld*
Cotton, diseases of
*B. malvacearum*. Angular Leaf Spot
*Fusarium vasinfectum*
Cranberry, diseases of
*Acanthorynchus vaccinii*. Rot
*Anthostomella destruens*
*Ceuthospora lunata*
*Guignardia vaccinii*. 'Scald'
*Helminthosporium inaequale*
Cucumber, diseases of
*B. lachrymans*. Angular Leaf Spot
*B. tracheiphilus*. Wilt
Currant, disease of
*Cytosporina ribis*
Cystitis, organisms isolated from cases of
Bacillus (coliform)

Denitrifying organisms
*B. denitrificans*
*B. denitrofluorescens liquefaciens*
*Pseudomonas* (*denitrifying*)
Dental caries
*B. acidophilus odontolyticus*
*Streptococcus mutans*
Diarrhoea, white, of chicks
*B. pullorum*
*see also* Fowl typhoid
Diarrhoeal conditions other than cholera, organisms associated with
*B. asiaticus mobilis*
*B. columbensis*
*B. faecalis alcaligenes*
Diarrhoeal conditions (*cont.*)
*B. morgani*
*B. proteus*
*B. pyocyaneus*
*B. schmitz*
Diphtheria
*Corynebacterium diphtheriae*
Diphtheroid organisms from animals
*Corynebacterium equi*
*C. pseudotuberculosis* Preisz-Nocard
*C. pseudotuberculosis murium*
*C. pyogenes*
—— from man
*Corynebacteria*. Mrs. M. M. Barratt's Types
*C. coryzae segmentosum*
*C. hofmannii*
Distemper, organisms associated with
*B. bronchisepticus*
Dog, diseases of
*B. bronchisepticus*
*B. haemoglobinophilus canis*
*Leishmania infantum*
*Leptospira icterohaemorrhagiae*. Epizootic Jaundice (No. 2041)
Dracaena, disease of
*Botryosporium longibrachiatum*
Dysentery, bacillary, organisms causing or associated with
*B. alkalescens*
*B. 'dispar'*
*B. dysenteriae* Flexner
*B. dysenteriae* Schmitz. *See B. schmitz*
*B. dysenteriae* Shiga
*B. dysenteriae* Sonne type III
*B. dysenteriae* Thøjtta type III. *See* Sonne type III
*B. paradysenteriae*
*B. schmitz*

Egg-plant, disease of
*Nectria ipomoeae*. Stem Rot
Enteric fever
*B. typhosus*
Enteritis in calves
*B. paracoli* (*B. enteritidis* Gärtner)
*B. suipestifer* (*Salmonella*, type Aertrycke)
—— in man. *See* Food-poisoning
Entomogenous fungi
*Gonatorrhodiella coccorum*
*Metarrhizium anisopliae*
*Spicaria javanica*

EPIDEMIC POLIOMYELITIS
*See* Poliomyelitis, epidemic
ERYSIPELAS, swine
*B. erysipelatis suis*
EUCALYPTUS, disease of
*Rhizoctonia lamellifera*
EYE DISEASES, Koch-Weeks' bacillus
*B. Morax-Axenfeld*

FAVUS
*Trichophyton*
FERMENTATION industries, micro-organisms associated with
*Amylomyces* (various species)
*Aspergillus* „
*B. acetoethylicum*
*B. butylicus*
*B. methanicus*
*B. volutans*
*Bacterium 'X'*
*Citromyces B*
*Clostridium pasteurianum*
*C. polymyxa*
*Debaryomyces globosus*
*Endomyces fibuliger*
*E. hordei*
*Hansenia apiculata*
*Hanseniaspora valbyensis*
*Lactobacillus pentoaceticus*
*Monilia candida*
*Mucor* (various species)
*Mycoderma arborescens*
*M. bordetii*
*M. cerevisiae*
*Oidium lactis*
*O. lupuli*
*Penicillium* (various species)
*Pichia* „
*Pseudosaccharomyces* (various species)
*Rhizopus* (various species)
*Saccharomyces* „
*Saccharomycoides ludwigii*
*Saccharomycopsis capsularis*
*Schizosaccharomyces* (various species)
*Schwanniomyces occidentalis*
*Thamnidium* spp.
*Torula* (Nos. 241A, 820, 907, 908)
*Willia* (various species)
Yeasts „ „
*Zygosaccharomyces barkeri*
FIG, disease of
*Botrytis cinerea*. Biological strain

FISH, diseases of
*B. salmonicida*. Syn. *B. truttae*
*B. tuberculosis*. Cold-blooded Type. *Fish tubercle*
FLAX, diseases of
*Colletotrichum linicolum*. Blight
*Fusarium lini*. Wilt
*Polyspora lini*
FOOD-POISONING in man
*B. aertrycke*
*B. botulinus*
*B. enteritidis* Gärtner (Nos. 125, 126)
*B. paratyphosus B* (No. 2033)
*B. paratyphosus C* (No. 749)
*B. suipestifer* (Nos. 72, 73, 74, 92, 115, 129, 175, 178, 1729, 1857, 1946)
*B. voldagsen*
FOWLS, diseases of: *see* Birds, diseases of
FOWL TYPHOID
*B. sanguinarium*
*B. gallinarum*
*see also* Diarrhoea, white, of chicks
FUNGI, tropical, associated with lesions of epidermis and epidermal appendages
*Acladium castellani*
*Cryptococcus macroglossiae*
*Endodermophyton indicum*
*E. tropicale*
*Epidermophyton rubrum*
*Hemispora rugosa*
*Monilia kruzei*
*M. macedoniensis*
*M. pinoyi*
*M. tropicalis*
*Oidium asteroides*
*O. rotundatum*
*Trichophyton balcaneum*

GAS GANGRENE, anaerobes liable to cause
*B. fallax*
*B. histolyticus*
*B. oedematiens*
*B. welchii*
*Vibrion septique*
anaerobes whose action may be ancillary to condition of
*B. aerofetidus*
*B. bifermentans*
*B. cochlearius*
*B. multifermentans tenalbus*

GAS GANGRENE (*cont.*)
*B. parasporogenes*
*B. sphenoides*
*B. sporogenes*
*B. tertius*
*B. tetanomorphus*
GERANIUM, disease of
*B. pelargoni.* Leaf Spot
GLADIOLUS, disease of
*B. gummisudans*
GLANDERS
*B. mallei*
GOAT, diseases of
*Actinomyces caprae*
*B. melitensis*
*B. paramelitensis*
*B. pyocyaneus* (No. 254)
*Pasteurella* (No. 1941). *See* Septicaemia, haemorrhagic
GONORRHOEA
*Gonococcus*
GOOSEBERRY, disease of
*Eidamia tuberculata*
GUINEA-PIG, diseases of
*B. bronchisepticus*
*B. caviae* (*Salmonella*, ? type). Guinea-pig epizootic
*B. pseudotuberculosis rodentium* (No. 941)
*B. suipestifer* (*Salmonella*, type Aertrycke) (No. 959)
*B. suipestifer* (*Salmonella*, type Reading) (No. 1878)
*Nocardia caviae*
*Pneumococcus* (No. 739)

HAEMORRHAGIC SEPTICAEMIA: *see* Septicaemia, haemorrhagic
HOG CHOLERA
*B. suipestifer* (*Salmonella*, type American Hog Cholera)
*B. suipestifer* (*Salmonella*, type English Hog Cholera)
*B. suipestifer* Uhlenhuth
HORSE, diseases of
*B. abortivo-equinus.* *See* Abortion in horses
*B. mallei.* *See* Glanders
*B. viscosum equi.* Syn. *B. nephritidis equi*
*Corynebacterium diphtheriae* (Nos. 853–9)
*C. equi*
*C. pseudotuberculosis* Preisz-Nocard
HORSE, diseases of (*cont.*)
*Cryptococcus farciminosus*
*Sporotrichum* sp. from horse (No. 879)
*Streptococcus* from Joint Ill (No. 647)
*Streptococcus* from Strangles (No. 2016)
*Streptothrix* (No. 630)
*Torula* from nasal tumour (No. 885)
*Trichophyton* from horse (No. 1408)
*Trypanosoma brucei* 'Nagana'
*T. equiperdum.* 'Dourine' of horses
HYACINTH, disease of
*B. hyacinthi.* Wakker's disease

INFLUENZA, organisms associated with
*B. influenzae*

JAUNDICE, LEPTOSPIRAL
*Leptospira icterohaemorrhagiae*
JOHNE'S DISEASE
*B. johne*
JOINT ILL in foals
*B. viscosum equi*
*Streptococcus* (No. 647)
JUTE, disease of
*Diplodia corchori.* 'Black-band'

KALA-AZAR
*Leishmania donovani*

LARKSPUR, disease of
*B. delphinii.* Blight
LEATHER, organism causing black and dark green spots on
*Fumago* (No. 968)
LEISHMANIASIS
*Leishmania infantum*
*L. donovani*
LEPROSY
*Bacilli associated with leprous lesions*
LEPTOSPIRAL JAUNDICE: *see* Jaundice, leptospiral
LETTUCE, diseases of
*B. aplatum.* Blight
*B. marginale.* Bacterial Soft Rot
*B. viridilividum.* Bacterial Soft Rot
*B. vitians.* Bacterial Soft Rot

LILAC, disease of
*B. syringae.* Blight
LOCUST, disease of
*Coccobacillus acridiorum*
LYMPHANGITIS, epizootic, in horses
*Cryptococcus farciminosus*
—— ulcerative, in horses
*Corynebacterium pseudotuberculosis* Preisz-Nocard

MADURA FOOT
*Nocardia indica*
MAIZE, disease of
*B. stewarti.* Stewart's Disease
MALTA FEVER
*B. melitensis*
*B. paramelitensis*
MAMMALIA (Miscellaneous), diseases of
*B. bronchisepticus.* Ferret
*B. pyocyaneus.* Kangaroo and Panda
*B. suipestifer* (Salmonella, type Aertrycke) Skunk (No. 106)
*Pasteurella* Porcupine and Rat Kangaroo. *See* Septicaemia, haemorrhagic
*B. tuberculosis.* Avian Type Rat Kangaroo
MASTITIS, contagious, in cows
*Streptococcus* (No. 648)
——, ovine gangrenous
*Micrococcus of ovine gangrenous mastitis*
MEASLES, organisms associated with
*Diplococcus* (No. 407)
MEAT in cold storage, organisms associated with
*Mucor* spp.
*Sporotrichum carnis*
*Thamnidium* spp.
*Torula botryoides*
*Wardomyces anomala*
MELIOIDOSIS in man and animals
*B. whilmori*
MICE, diseases of
*B. murisepticus*
*B. pestis caviae.* Mouse typhoid (*Salmonella,* type Aertrycke)
*Corynebacterium pseudotuberculosis murium*
*Pasteurella* mouse (No. 948). *See* Septicaemia, haemorrhagic
MICHAELMAS DAISY, diseases of
*B. tumefaciens.* Crown Gall
*Cephalosporium asteris*

MILK and milk products, micro-organisms of
*B. acidophilus*
*B. bulgaricus*
*B. güntheri*
Emmentaler Coccus
*Streptococcus acidi lactici*
*S. bulgaricus*
*S. lacticus*
*Torula cremoris*
*T. spherica*
*Tyrothrix tenuis*
Yeast (lactose-fermenting) (No. 607)
—— ropiness in
*Staphylococcus cremoris-viscosi*
MONKEY, diseases of
*B. bronchisepticus*
*B. pyocyaneus*
*B. suipestifer* (*Salmonella,* type English Hog Cholera) (No. 91)
MOSSY FOOT
*Phialophora verrucosa*
MULBERRY, disease of
*B. mori.* Blight
MUSHROOM, disease of
*B. tolaasi.* Brown Spot
MYCETOMA
*Nocardia indica*
*Phialophora verrucosa*

NASTURTIUM, disease of
*B. aptatum.* Blight
NITROGEN FIXING ORGANISMS
*Azotobacter chroococcum*
*B. trauffautii*
*B. urea*
*Pseudomonas radicicola*

OAK, disease of
*Eidamia catenulata*
OATS, disease of
*B. coronafaciens.* Halo Blight
ONION, diseases of
*Botrytis allii*
*Sclerotium cepivorum.* 'Mouldy Nose'
OVINE GANGRENOUS MASTITIS
*See* Mastitis, ovine gangrenous

PALM, disease of
*Pestalozzia palmarum*
PAPAW, disease of
*Phytophthora faberi*
PARACHOLERA
*Vibrio paracholerae*

PARATYPHOID A FEVER
*B. paratyphosus A*
—— B FEVER
*B. paratyphosus B* (*Salmonella*, type Schottmüller)
—— C FEVER
*B. paratyphosus C* (*Salmonella*, type Eastern Hog Cholera)
*B. paratyphosus C* (*Salmonella*, type English Hog Cholera)
PASTEURELLOSIS: *see* Plague *and* Septicaemia, haemorrhagic, in animals
PEACH, diseases of
*B. pruni.* Black Spot and Canker
*B. tumefaciens.* Crown Gall
*Phyllosticta prunicola.* Leaf Blotch and 'Shot-hole'
PEAR, diseases of
*B. amylovorus.* Fire Blight
*B. barkeri.* Barker's Blossom Blight
*Physalospora cydoniae.* Canker
*Venturia pirina.* Scab
PEONY, disease of
*Botrytis paeoniae.* Wilt
PHOTOBACTERIA
*B. phosphorescens*
PIG, diseases of
*B. abortus.* *See* Abortion
*B. erysipelatis suis.* Swine erysipelas
*B. suipestifer.* (*Salmonella*, type American Hog Cholera)
*B. suipestifer.* (*Salmonella*, type English Hog Cholera)
*B. suipestifer* Uhlenhuth (No. 352)
*B. suis* (Nos. 425 and 426)
*B. suisepticus.* *See* Septicaemia, haemorrhagic
*Bacillus of Swine Typhus* (Nos. 354 and 355)
PLAGUE
*B. pestis*
PLANTS, bacteria causing diseases of
*B. amylovorus*
*B. angulatum*
*B. aptatum*
*B. aroideae*
*B. atrofaciens*
*B. barkeri*
*B. beticolum*
*B. campestre*
PLANTS, bacteria causing diseases of (*cont.*)
*B. cannae*
*B. carotovorus*
*B. coronafaciens*
*B. delphinii*
*B. gummisudans*
*B. hyacinthi*
*B. lachrymans*
*B. lathyri*
*B. malvacearum*
*B. marginale*
*B. michiganense*
*B. mori*
*B. pelargoni*
*B. phaseoli*
*B. phaseoli* var. *sojense*
*B. phytophthorus*
*B. proteamaculans*
*B. pruni*
*B. solanisaprus*
*B. stewarti*
*B. syringae*
*B. tabacum*
*B. tolaasi*
*B. tracheiphilus*
*B. trifoliorum*
*B. tumefaciens*
*B. viridilividum*
*B. vitians*
PLANTS, fungi causing diseases of
*Acanthorynchus vaccinii*
*Acrospeira mirabilis*
*Actinomyces scabies*
*Alternaria grossularieae*
*Anthostomella destruens*
*Botryosporium longibrachiatum*
*Botrytis allii*
*Botrytis cinerea*
*Botrytis paeoniae*
*Botrytis tulipae*
*Cephalosporium asteris*
*Cephalosporium sacchari*
*Cephalotechium roseum*
*Cercosporella antirrhini*
*Ceuthospora lunata*
*Cladosporium fulvum*
*Colletotrichum camelliae*
*Colletotrichum lindemuthianum*
*Colletotrichum linicolum*
*Colletotrichum phomoides*
*Coniothecium chromatosporum*
*Cytosporina ribis*
*Diaporthe perniciosa*
*Diplodia corchori*

PLANTS, fungi causing diseases of (*cont.*)
*Diplodia natalensis*
*Diplodina lycopersici*
*Eidamia catenulata*
*Eidamia tuberculata*
*Eidamia viridescens*
*Fusarium coeruleum*
*Fusarium dianthi*
*Fusarium lini*
*Fusarium mali*
*Fusarium solani*
*Fusarium vasinfectum*
*Gibberella saubinetii*
*Glomerella cingulata*
*Guignardia vaccinii*
*Helminthosporium inaequale*
*Helminthosporium sacchari*
*Helminthosporium sativum*
*Heterosporium echinulatum*
*Nectria diversispora*
*Nectria ipomoeae*
*Pestalozzia palmarum*
*Pestalozzia theae*
*Phoma alternariaceum*
*Phoma betae*
*Phoma pomi*
*Phyllosticta prunicola*
*Physalospora cydoniae*
*Phytophthora cryptogoea*
*Phytophthora erythroseptica*
*Phytophthora faberi*
*Phytophthora fagi*
*Pleospora pomorum*
*Polyopeus aureus*
*Polyopeus pomi*
*Polyopeus purpureus*
*Polyspora lini*
*Pythium aphanidermatum*
*Rhizoctonia destruens*
*Rhizoctonia lamellifera*
*Rhizoctonia solani*
*Schizoparme straminea*
*Sclerotinia cinerea*
*Sclerotinia fructigena*
*Sclerotinia sclerotiorum*
*Sclerotinia trifoliorum*
*Sclerotium cepivorum*
*Sclerotium rolfsii*
*Sclerotium tuliparum*
*Septoria lycopersica*
*Stereum purpureum*
*Thielaviopsis ethaceticus*
*Thielaviopsis paradoxa*
*Trachysphaera fructigena*

PLANTS, fungi causing diseases of (*cont.*)
*Venturia inaequalis*
*Venturia pirina*
PLUM, diseases of
*B. pruni.* Black Spot and Canker
*Diaporthe perniciosa.* 'Die-back'
*Sclerotinia cinerea*
*Stereum purpureum.* Silver Leaf
PNEUMONIA
*Pneumococcus*
POLIOMYELITIS, EPIDEMIC, organisms associated with
*Streptococcus from Epidemic Poliomyelitis*
POTATO, diseases of
*Actinomyces scabies.* Scab
*B. phytophthorus.* Bacterial Black Rot
*B. solanisaprus.* Soft Rot
*Fusarium coeruleum.* Tuber Rot
*Fusarium solani.* Dry Rot
*Phytophthora erythroseptica*
*Rhizoctonia destruens*
*Rhizoctonia solani.* Scurf
PROTEA, disease of
*B. proteamaculans*
PROTOZOA
*Leishmania donovani*
*L. infantum*
*Leptomonas from gecko*
*Trypanosoma brucei*
*T. equiperdum*
*T. gambiense*
*T. rhodesiense*
*Trypanosome du crapaud*
PYELONEPHRITIS in cattle
*Corynebacterium pyogenes*

QUINCE, diseases of
*B. amylovorus.* Fire Blight
*Botrytis cinerea*, biological strain

RABBIT, &c., diseases of
*B. bronchisepticus*
*B. cuniculisepticus*
*B. lepisepticus*
*Nocardia cuniculi*
RAT, diseases of
*B. bronchisepticus*
*B. enteritidis* Gärtner (Nos. 205, 617, 618, and 810)
*B. whitmori.* *See* Melioidosis
*Leptospira icterohaemorrhagiae* (No. 2039)

RAUSCHBRAND (quarter ill)
*B. chauvoei*
REPTILIA, diseases of
*B. tuberculosis.* Cold-blooded Strains
*Cayman strain*
*Terrapin strain.* Vevers
*Tortoise tubercle* Friedmann
*Leptomonas* from *gecko*
RESPIRATORY TRACT, Gram-negative cocci from
*Micrococcus catarrhalis*
RHINOSCLEROMA
*Bacillus of Rhinoscleroma*
ROPINESS in bread
*B. mesentericus* (Jordan Lloyd's types)
*B. mesentericus panis viscosi*
—in milk
*Staphylococcus cremoris-viscosi*
RUBBER, disease of
*Nectria diversispora*

SALMONELLOSIS
*B. abortivo-equinus*
*B. anatum*
*B. caviae*
*B. enteritidis* Gärtner
*B. gallinarum*
*B. paracoli*
*B. paratyphosus B*
*B. paratyphosus C*
*B. psittacosis*
*B. pullorum*
*B. sanguinarium*
*Bacillus of Schweinepest*
*B. suipestifer*
*B. suis*
*Bacillus of swine typhus*
*B. typhi suis*
SAN JOAQUIN VALLEY DISEASE
*Coccidioides immitis*
SCARLET FEVER, organisms associated with
*Streptococcus from Scarlet Fever*
SEPTICAEMIA, haemorrhagic, in animals
*B. avisepticus*
*B. bovisepticus*
*B. cuniculisepticus*
*B. lepisepticus*
*B. ovisepticus*
*B. pseudotuberculosis rodentium*
*B. suisepticus*
*Pasteurella*

SEPTICAEMIC PROCESSES (boils, abscesses, &c.)
*Micrococcus tetragenus*
*Staphylococcus* (various species)
*Streptococcus* ,,
SHEEP, diseases of
*B. ovisepticus.* *See* Septicaemia, haemorrhagic
*Micrococcus of ovine gangrenous mastitis*
SNAPDRAGON, disease of
*Cercosporella antirrhini*
SOIL, AIR, WATER, DUST, &c., organisms from
*Absidia cylindrospora*
*Acrostalagmus cinnabarinus*
*Actinomyces* spp.
*Aspergillus* spp.
*Azotobacter chroococcum*
*B. dendroides*
*B. fluorescens liquefaciens*
*B. fluorescens non-liquefaciens*
*B. fulvum*
*B. megatherium*
*B. mesentericus ruber*
*B. mesentericus vulgatus*
*B. mycoides*
*B. prodigiosus*
*B. proteus mirabilis*
*B. proteus vulgaris*
*B. proteus zenkeri*
*B. subtilis*
*B. truffautii*
*B. ureae*
*B. violaceus*
*Botrytis pyramidalis*
*Gliocladium penicilloides*
*Micrococcus aurantiacus*
*M. badius*
*M. candicans*
*M. concentricus*
*M. flavus*
*M. roseus*
*M. sulphureus*
*Monilia variabilis*
*Monosporium acuminatum*
*Mucor* spp.
*Nocardia dissonviller*
*Oospora humi*
*Penicillium* spp.
*Pleurage verruculosis*
*Pseudomonas* (*denitrifying*)
*Pseudomonas radicicola*
*Rhizopus* spp.
*Sarcina aurantiaca*

Soil, &c., organisms from (*cont.*)
*S. lutea*
*Slysanus stemonites*
*Trichoderma koningii*
*Vibrios* from water, &c.
Soy bean, disease of
*B. phaseoli* var. *sojense*
—organism from nodule of root of
*Pseudomonas radicicola*
Sporotrichosis in animals
*Sporothrix*
—in man
*Sporotrichum schenckii*
Sprue, organisms associated with
*Monilia psilosis*
*Parasaccharomyces ashfordi*
Strangles in horses
*Streptococcus* (No. 2016)
Strawberry, disease of
*Schizoparme straminea*
Streptotrichosis in animals
*Streptothrix* (No. 630)
—in man
*Streptothrix* (Nos. 146, 450, and 658)
Sugar cane, diseases of
*Cephalosporium sacchari*
*Helminthosporium sacchari*
*Thielaviopsis paradoxa*
Swine erysipelas
*See* Erysipelas, Swine
—— fever
*Bacillus of Schweinepest*
—— typhus
*Bacillus of swine typhus*

Tea, diseases of
*Colletotrichum camelliae*
*Pestalozzia theae*
Tetanus
*B. tetani*
Thrush
*Monilia albicans*
Timothy grass, bacillus of
*B. phlei*
Tinea circinata
*Trichophyton*
—— tonsurans
*Trichophyton*
Tobacco, diseases of
*B. angulatum.* Angular Spot
*B. tabacum.* Wild Fire
*Pythium aphanidermatum*
Tomato, diseases of
*B. lathyri.* Stripe Disease
Tomato, diseases of (*cont.*)
*B. michiganense.* Grand Rapids Disease
*Cladosporium fulvum.* Scab
*Colletotrichum phomoides.* Anthracnose
*Diplodina lycopersica*
*Phoma alternariaceum*
*Phytophthora cryptogoea*
*Septoria lycopersica*
Torula infection in animals
*Torula* (No. 885)
in man
*Torula* (Nos. 886, 1641, and 1642, 1842, and 1843)
*Torula histolytica*
Trypanosomiasis
*Trypanosoma brucei*
*T. equiperdum*
*T. gambiense*
*T. rhodesiense*
*Trypanosome du crapaud*
Tuberculosis, avian
*B. tuberculosis* (Nos. 51 and 2007)
——, bovine
*B. tuberculosis* (Nos. 46, 47, 913, and 1782)
——, cold-blooded
*B. tuberculosis* (Nos. 946, 1542, 2006, 2013, and 2014)
——, human
*B. tuberculosis* (Nos. 48, 50, and 52)
Tulip, diseases of
*Botrytis tulipae*
*Sclerotium tuliparum*
Turnip, disease of
*B. carotovorus.* Soft Rot
Typhoid fever
*B. typhosus*
*see also* Fowl typhoid

Ulcerative lymphangitis in horses
*Corynebacterium pseudotuberculosis* Preisz-Nocard
Undulant fever
*B. melitensis*
*B. paramelitensis*

Vibrio, filter passing
*Vibrio percolans*
Vinegar, organisms associated with manufacture of
*B. aceti*

VINEGAR organisms associated with manufacture of (*cont.*)
*B. kützingianum*
*B. pasteurianum*
*B. xylinum*
Bacterium from vinegar
*see also* Acetic acid

WATER: *see* Soil, Air, Water, Dust, &c., organisms from
WEIL-FELIX REACTION
*B. proteus vulgaris* X. 19 (No. 67)
WEIL'S DISEASE
*Leptospira icterohaemorrhagiae*

WHEAT, disease of
*B. atrofaciens.* Glume Rot
*Helminthosporium sativum*
WHOOPING-COUGH
*B. pertussis*

YEAST, baker's
*Saccharomyces cerevisiae* (No. 815)
brewer's
*Saccharomyces cerevisiae* (No. 381)
*Yeast* (*Frohberg*, *Logos*, and *Saaz*)
——, ('*Mineral Futterhefe*')
——, *Rasse XII*

Printed under the authority of His Majesty's Stationery Office
at the University Press, Oxford.

# Privy Council
# MEDICAL RESEARCH COUNCIL

*(Formerly Medical Research Committee, National Health Insurance).*

## LIST OF PUBLICATIONS

*October 1925*

**The following publications relating to the work of the Medical Research Council can be purchased through any bookseller or directly from H.M. Stationery Office, at the following addresses: Adastral House, Kingsway, London, W.C. 2, and 28 Abingdon Street, London, S.W. 1; York Street, Manchester; 1 St. Andrew's Crescent, Cardiff; 120 George Street, Edinburgh; or through any bookseller.**

They may also be ordered from the following: U.S.A.: The British Library of Information, 8th Floor, 44 Whitehall Street, New York. CANADA: Messrs. Wm. Dawson & Sons, Ltd., 235 Fort Street, Winnipeg; 19 Bisson Street, Montreal; 87 Queen Street East, Toronto. INDIA: Messrs. Thacker, Spink & Co., Calcutta and Simla; Messrs. Thacker & Co., Ltd., Bombay; Messrs. Higginbothams, Ltd., Madras and Bangalore. NEW ZEALAND: The Government Printer, Printing and Stationery Department, Wellington. SOUTH AFRICA: Messrs. Wm. Dawson & Sons (South Africa), Ltd., 29-31 Long Street, Cape Town.

---

ANNUAL REPORTS OF THE MEDICAL RESEARCH COMMITTEE:—

| | | | |
|---|---|---|---|
| No. 1. | 1914–1915. | [Cd. 8101.] | Price 3*d.*, post free 4*d.* |
| No. 2. | 1915–1916. | [Cd. 8399.] | Price 3½*d.*, post free 4½*d.* |
| No. 3. | 1916–1917. | [Cd. 8825.] | Price 6*d.*, post free 6½*d.* |
| No. 4. | 1917–1918. | [Cd. 8981.] | Price 4*d.*, post free 5½*d.* |
| No. 5. | 1918–1919. | [Cmd. 412.] | Price 6*d.*, post free 7½*d.* |

ANNUAL REPORTS OF THE MEDICAL RESEARCH COUNCIL:—

| | | |
|---|---|---|
| 1919–1920. | [Cmd. 1088.] | Price 9*d.*, post free 10½*d.* |
| 1920–1921. | | Price 3*s.* 6*d.*, post free 3*s.* 8*d.* |
| 1921–1922. | | Price 3*s.* 6*d.*, post free 3*s.* 8*d.* |
| 1922–1923. | | Price 3*s.* 6*d.*, post free 3*s.* 8*d.* |
| 1923–1924. | | Price 3*s.* 6*d.*, post free 3*s.* 8*d.* |

---

## Special Report Series

**Tuberculosis:**

No. 1. First Report of the Special Investigation Committee upon the Incidence of Phthisis in relation to Occupations.—The Boot and Shoe Trade. Price 3*d.*, post free 3½*d.*

No. 18. An Investigation into the Epidemiology of Phthisis Pulmonalis in Great Britain and Ireland. Parts I and II. By John Brownlee. Price 1*s.* 3*d.*, post free 1*s.* 4½*d.*

No. 22. An Inquiry into the Prevalence and Aetiology of Tuberculosis among Industrial Workers, with special reference to Female Munition Workers. By Major Greenwood and A. E. Tebb. Price 1*s.* 6*d.*, post free 1*s.* 7*d.*

No. 33. Pulmonary Tuberculosis: Mortality after Sanatorium Treatment. By Noel D. Bardswell and J. H. R. Thompson. Price 2*s.*, post free 2*s.* 2*d.*

No. 46. An Investigation into the Epidemiology of Phthisis in Great Britain and Ireland. Part III. By John Brownlee. Price 2*s.* 6*d.*, post free 2*s.* 7½*d.*

No. 67. Report on Artificial Pneumothorax. By L. S. T. Burrell and A. S. MacNalty. Price 2*s.* 6*d.*, post free 2*s.* 8*d.*

No. 76. Tuberculosis in Insured Persons accepted for Treatment by the City of Bradford Health Committee. By H. Vallow. Price 6*d.*, post free 7*d.*

No. 83. Tuberculosis of the Larynx. By Sir St. Clair Thomson. Price 2*s.* 6*d.*, post free 2*s.* 8*d.*

No. 85. An Inquiry into the After-Histories of Patients treated at the Brompton Hospital Sanatorium at Frimley, during the years 1905–14. By Sir P. H.-S. Hartley, R. C. Wingfield, and J. H. R. Thompson. Price 1*s.* 6*d.*, post free 1*s.* 7*d.*

No. 94. Tuberculin Tests in Cattle, with special reference to the Intradermal Test. By the Tuberculin Committee. Price 3*s.*, post free 3*s.* 3*d.*

**Cerebro-spinal Fever:**

No. 2. Report of the Special Advisory Committee upon Bacteriological Studies of Cerebro-spinal Fever during the Epidemic of 1915. *Out of print.*

No. 3. Bacteriological Studies in the Pathology and Preventive Control of Cerebro-spinal Fever among the Forces during 1915 and 1916. By M. H. Gordon, Martin Flack, P. W. Bassett-Smith, and T. G. M. Hine and W. J. Tulloch. Price 1*s.* 6*d.*, post free 1*s.* 8*d.*

No. 17. I. A Report upon the Seasonal Outbreak of Cerebro-spinal Fever in the Navy at Portsmouth, 1916–1917. By Paul Fildes and S. L. Baker.
II. The Treatment of Cerebro-spinal Meningitis by Antimeningococcus Serum at the Royal Naval Hospital, Haslar, 1915–16–17. By G. P. Adshead. Price 2*s.* 6*d.*, post free 2*s.* 8½*d.*

## Special Report Series—*continued.*

No. 50. Cerebro-spinal Fever. Studies in the Bacteriology, Preventive Control, and Specific Treatment of Cerebro-spinal Fever among the Military Forces, 1915–19. By M. H. Gordon and others. Price 4*s.*, post free 4*s.* 3*d.*

**Dysentery:**

Reports upon Investigations in the United Kingdom of Dysentery Cases received from the Eastern Mediterranean.

No. 4. I. Amoebic Dysentery and the Protozoological Investigation of Cases and Carriers. By Clifford Dobell. Price 1*s.*, post free 1*s.* 1½*d.*

No. 5. II. Report upon 878 Cases of Bacillary Enteritis. By L. Rajchman and G. T. Western. *Out of print.*

No. 6. III. Report upon recovered Cases of Intestinal Disease in the Royal Naval Hospital, Haslar, 1915–16. By Paul Fildes and others.

IV. Report upon combined Clinical and Bacteriological Studies of Dysentery Cases from the Mediterranean. By S. R. Douglas and L. Colebrook. Price 4*s.* 6*d.*, post free 4*s.* 7½*d.*

No. 7. V. Report upon 2,360 Enteritis 'Convalescents' received at Liverpool from various Expeditionary Forces. By E. Glynn and others. Price 6*s.*, post free 6*s.* 2*d.*

---

No. 15. A Study of 1,300 Convalescent Cases of Dysentery from Home Hospitals: with special reference to the Incidence and Treatment of Amoebic Dysentery Carriers. By Clifford Dobell, H. S. Gettings, Margaret W. Jepps, and J. B. Stephens. Price 1*s.* 3*d.*, post free 1*s.* 4*d.*

No. 29. A Contribution to the Study of Chronicity in Dysentery Carriers. By W. Fletcher and Doris L. Mackinnon. Price 9*d.*, post free 10*d.*

No. 30. An Investigation of the Flexner-Y Group of Dysentery Bacilli. By S. H. Gettings. Price 1*s.*, post free 1*s.* 1*d.*

No. 40. Studies of Bacillary Dysentery occurring in the British Forces in Macedonia. By L. S. Dudgeon and others. Price 3*s.*, post free 3*s.* 1½*d.*

No. 42. A Study of the Serological Races of the Flexner Group of Dysentery Bacilli. By Sir F. W. Andrewes and A. C. Inman. Price 2*s.*, post free 2*s.* 1½*d.*

**Alcohol:**

No. 31. Alcohol—Its Absorption into and Disappearance from the Blood under different conditions. By E. Mellanby. Price 1*s.*, post free 1*s.* 1*d.*

No. 34. The Influence of Alcohol on Manual Work and Neuro-muscular Co-ordination. By H. M. Vernon. Price 2*s.*, post free 2*s.* 1*d.*

No. 56. The Effects of Alcohol and some other Drugs during Normal and Fatigued Conditions. By W. McDougall and May Smith. Price 1*s.*, post free 1*s.* 1*d.*

**Venereal Diseases:**

No. 23. An Analysis of the Results of Wassermann Reactions in 1,435 Cases of Syphilis or Suspected Syphilis. By Paul Fildes and R. J. G. Parnell, Price 2*s.*, post free 2*s.* 1*d.*

No. 41. I. An Investigation into the Ultimate Results of the Treatment of Syphilis with Arsenical Compounds. By Paul Fildes and R. J. G. Parnell.

II. A Clinical Study of the Toxic Reactions which follow the Intravenous Administration of '914'. By R. J. G. Parnell and Paul Fildes. Price 2*s.*, post free 2*s.* 1*d.*

No. 45. Unsuspected Involvement of the Central Nervous System in Syphilis. By Paul Fildes, R. J. G. Parnell, and H. B. Maitland. Price 1*s.*, post free 1*s.* 1*d.*

No. 47. The Accuracy of Wassermann Tests, applied before and after death, estimated by Necropsies. I. The Wassermann Test applied before death. By H. M. Turnbull. Price 2*s.* 6*d.*, post free 2*s.* 7½*d.*

No. 55. I. Results of the Examination of Tissues from Eight Cases of Death following Injections of Salvarsan. By H. M. Turnbull.

II. The Influence of Salvarsan Treatment on the Development and Persistence of Immunity, as indicated by Measurements of Agglutinins. By E. W. Ainley Walker. Price 3*s.*, post free 3*s.* 1½*d.*

No. 78. The Serum Diagnosis of Syphilis: The Wassermann and Sigma Reactions compared. Price 5*s.* 6*d.*, post free 5*s.* 9*d.*

(Vide infra, *Reports of the Salvarsan Committee and of the Bacteriological Committee*, Nos. I–IV.)

**Bacteriology:**

No. 12. The Classification and Study of the Anaerobic Bacteria of War Wounds. By J. McIntosh. Price 2*s.*, post free 2*s.* 2*d.*

No. 24. A Report on the Investigation of an Epidemic caused by Bacillus aertrycke. By H. Marrian Perry and H. L. Tidy. Price 9*d.*, post free 10*d.*

No. 36. Studies of Influenza in the Hospitals of the British Armies in France, 1918. Price 3*s.* 6*d.*, post free 3*s.* 8*d.*

No. 48. A Report on the probable Proportion of Enteric Infections among Undiagnosed Febrile Cases invalided from the Western Front since October, 1916. By W. W. C. Topley, S. G. Platts, and C. G. Imrie. Price 3*s.*, post free 3*s.* 1½*d.*

## Special Report Series—*continued.*

No. 49. On the Destruction of Bacteria in Milk by Electricity. By J. M. Beattie, and F. C. Lewis. Price 9*d.*, post free 10*d.*
No. 57. Studies in Wound Infections. By S. R. Douglas, A. Fleming, and L. Colebrook. Price 4*s.* 6*d.*, post free 4*s.* 8½*d.*
No. 63. Studies in the Aetiology of Epidemic Influenza. By J. McIntosh. Price 2*s.* 6*d.*, post free 2*s.* 7*d.*
No. 64. Catalogue of the National Collection of Type Cultures. *New Edition.*
No. 75. The Schick Test, Diphtheria and Scarlet Fever. By S. F. Dudley. Price 1*s.*, post free 1*s.* 1½*d.*
No. 79. Bacteriological and Clinical Observations on Pneumonia and Empyemata, with Special Reference to the Pneumococcus and to Serum Treatment. By E. E. Glynn and Lettice Digby. Price 5*s.*, post free 5*s.* 3*d.*
No. 91. An Investigation of the Salmonella Group, with Special Reference to Food Poisoning. By W. G. Savage and P. Bruce White. Price 3*s.* 6*d.*, post free 3*s.* 8*d.*
No. 92. Food Poisoning: a Study of 100 Recent Outbreaks. By W. G. Savage and P. Bruce White. Price 2*s.* 6*d.*, post free 2*s.* 8*d.*
No. 98. Studies of the Viruses of Vaccinia and Variola. By M. H. Gordon.

### Rickets:

No. 20. A Study of Social and Economic Factors in the Causation of Rickets, with an Introductory Historical Survey. By L. Findlay and Margaret Ferguson. *Out of print.*
No. 61. Experimental Rickets. By E. Mellanby. Price 4*s.*, post free 4*s.* 2*d.*
No. 68. Rickets: the Relative Importance of Environment and Diet as Factors in Causation. By H. Corry Mann. Price 2*s.* 6*d.*, post free 2*s.* 7½*d.*
No. 71. The Aetiology and Pathology of Rickets from an experimental point of view. By V. Korenchevsky. Price 4*s.*, post free 4*s.* 3*d.*
No. 77. Studies of Rickets in Vienna, 1919–22. Price 7*s.* 6*d.*, post free 7*s.* 10½*d.*
No. 93. Experimental Rickets: The Effect of Cereals and their Interaction with other factors of Diet and Environment in producing Rickets. By E. Mellanby. Price 3*s.*, post free, 3*s.* 8*d.*

### Child Life Investigations:

No. 10. The Mortalities of Birth, Infancy, and Childhood. By A. K. Chalmers, W. A. Brend, L. Findlay, and J. Brownlee. Price 1*s.* 6*d.*, post free 1*s.* 7½*d.*
No. 74. The Relation between Home Conditions and the Intelligence of School Children. By L. Isserlis. Price 1*s.*, post free 1*s.* 1*d.*
No. 81. The Effect of Maternal Social Conditions and Nutrition upon Birth-weight and Birth-length. By M. Bruce Murray. Price 1*s.*, post free 1*s.* 1*d.*
No. 82. Maternal Syphilis as a cause of Death of the Foetus and of the New-born Child. By J. N. Cruickshank. Price 1*s.* 6*d.*, post free 1*s.* 7½*d.*
No. 86. The Estimation of Foetal Age, the Weight and Length of Normal Foetuses, and the Weights of Foetal Organs. By J. N. Cruickshank, M. J. Miller, and F. J. Browne. Price 2*s.* 6*d.*, post free 2*s.* 7½*d.*

### Radium:

No. 62. Medical Uses of Radium: Studies of the Effects of Gamma Rays from a large Quantity of Radium. By various authors. Price 5*s.*, post free 5*s.* 3*d.*
No. 90. Medical Uses of Radium: Summary of Reports from Research Centres for 1923. Price 1*s.*, post free, 1*s.* 1*d.*

### Reports of the Salvarsan Committee:

No. 44. I. Reports of the Special Committee upon the Manufacture, Biological Testing, and Clinical Administration of Salvarsan and of its Substitutes. Price 1*s.*, post free 1*s.* 1*d.*
No. 66. II. Toxic effects following the Employment of Arsenobenzol Preparations. Price 2*s.*, post free 2*s.* 1½*d.*

### Reports of the Bacteriological Committee:

No. 14. I. The Wassermann Test. Price 1*s.*, post free 1*s.* 1*d.*
No. 19. II. The Laboratory Diagnosis of Gonococcal Infections.
III. Methods for the Detection of Spirochaetes. *New Edition.* Price 1*s.* 6*d.* post free 1*s.* 7½*d.*
No. 21. IV. The Diagnostic Value of the Wassermann Test. Price 1*s.*, post free 1*s.* 1*d.*
No. 35. V. The Reaction of Media. Price 6*d.*, post free 7*d.*
No. 51. VI. The Laboratory Diagnosis of Acute Intestinal Infections, including the Principles and Practice of the Agglutination Tests. Price 4*s.* 6*d.*, post free 4*s.* 8*d.*
Diphtheria; its Bacteriology, Pathology, and Immunology. Price 12*s.* 6*d.*, post free 13*s.* 3*d.*

### Reports of the Special Investigation Committee on Surgical Shock and Allied Conditions:

No. 25. I–VII. Wound-Shock and Haemorrhage. Price 4*s.*, post free 4*s.* 5½*d.*
No. 26. VIII. Traumatic Toxaemia as a Factor in Shock. Price 1*s.*, post free 1*s.* 1*d.*
No. 27. IX. Blood Volume Changes in Wound-Shock and Primary Haemorrhage. By N. M. Keith. Price 9*d.*, post free 10*d.*

**Reports of the Air Medical Investigation Committee:**

No. 37. VIII. The Effects of Diminished Tension of Oxygen, with especial reference to the Activity of the Adrenal Glands. By C. H. Kellaway.

IX. The Ear in relation to certain Disabilities in Flying. By S. Scott. Price 1*s.*, post free 1*s.* 1*d.*

No. 53. The Medical Problems of Flying (including Reports Nos. I-VII). Price 6*s.*, post free 6*s.* 4*d.*

**Reports of the Committee upon Accessory Food Factors (Vitamins):**

No. 38. Report on the Present State of Knowledge of Accessory Food Factors (Vitamins). Price 4*s.* 6*d.*, post free 4*s.* 8½*d.* (*Second edition, revised and enlarged.*)

**Reports of the Committee upon Anaerobic Bacteria and Infections:**

No. 39. Report on the Anaerobic Infections of Wounds and the Bacteriological and Serological Problems arising therefrom. Price 6*s.*, post free 6*s.* 3½*d.*

**Reports of the Committee upon Injuries of the Nervous System:**

No. 54. I. The Diagnosis and Treatment of Peripheral Nerve Injuries. Price 2*s.*, post free 2*s.* 1½*d.*

No. 88. II. Injuries of the Spinal Cord and Cauda Equina. Price 1*s.* 6*d.*, post free 1*s.* 7½*d.*

**Reports of the Committee for the Investigation of the Causes of Dental Disease:**

No. 70. I. The Structure of Teeth in relation to Dental Disease. By J. Howard Mummery. Price 2*s.*, post free 2*s.* 1*d.*

**Reports on Miners' Diseases, etc.:**

No. 65. First Report of the Miners' Nystagmus Committee. Price 1*s.* 6*d.*, post free 1*s.* 7½*d.*

No. 80. Second Report of the Miners' Nystagmus Committee. Price 9*d.*, post free 10*d.*

No. 87. Report on the Nutrition of Miners and their Families. Price 1*s.* 3*d.*, post free 1*s.* 4*d.*

No. 89. Report on Miners' 'Beat Knee', 'Beat Hand', and 'Beat Elbow'. By E. L. Collis and T. L. Llewellyn. Price 1*s.* 6*d.*, post free 1*s.* 7½*d.*

**Reports on Biological Standards:**

No. 69. I. Pituitary Extracts. By J. H. Burn and H. H. Dale. Price 1*s.* 6*d.*, post free 1*s.* 7*d.*

---

No. 8. Report upon Soldiers returned as Cases of 'Disordered Action of the Heart' (D.A.H.), or 'Valvular Disease of the Heart' (V.D.H.). By Sir Thomas Lewis. Price 1*s.*, post free 1*s.* 1*d.*

No. 9. A Report upon the use of Atropine as a Diagnostic Agent in Typhoid Infections. By H. F. Marris. Price 1*s.*, post free 1*s.* 1*d.*

No. 11. The Causation and Prevention of Tri-nitro-toluene (T.N.T.) Poisoning. By Benjamin Moore. Price 1*s.*, post free 1*s.* 1½*d.*

No. 13. An Enquiry into the Composition of Dietaries, with special reference to the Dietaries of Munition Workers. By Viscount Dunluce and Major Greenwood. Price 9*d.*, post free 10*d.*

No. 16. A Report on the Causes of Wastage of Labour in Munition Factories. By Major Greenwood. Price 1*s.* 6*d.*, post free 1*s.* 7*d.*

No. 32. The Science of Ventilation and Open-air Treatment. Part I. By Leonard Hill. Price 10*s.*, post free 10*s.* 5½*d.*

No. 43. Albuminuria and War Nephritis among British Troops in France. By H. MacLean. Price 2*s.* 6*d.*, post free 2*s.* 8*d.*

No. 52. The Science of Ventilation and Open-air Treatment. Part II. By Leonard Hill. Price 6*s.*, post free 6*s.* 4½*d.*

No. 58. T.N.T. Poisoning and the Fate of T.N.T. in the Animal Body. By W. J. O'Donovan and others. Price 3*s.*, post free 3*s.* 1½*d.*

No. 59. A Report on the Occurrence of Intestinal Protozoa in the Inhabitants of Britain. By Clifford Dobell. Price 2*s.*, post free 2*s.* 1½*d.*

No. 60. The Use of Death-rates as a Measure of Hygienic Conditions. By John Brownlee. Price 3*s.*, post free 3*s.* 1½*d.*

No. 72. The Acid-base Equilibrium of the Blood. By the Haemoglobin Committee. Price 2*s.*, post free 2*s.* 1*d.*

No. 73. The Kata-thermometer in Studies of Body Heat and Efficiency. By Leonard Hill and others. Price 5*s.*, post free 5*s.* 2½*d.*

No. 84. The Application of the Air Force Physical Efficiency Tests to Men and Women. By L. D. Cripps. Price 1*s.* 6*d.*, post free 1*s.* 7½*d.*

No. 95. Internal Migration and its Effects upon the Death-Rates: with Special Reference to the County of Essex. By A. B. Hill. Price 3*s.* 6*d.*, post free 3*s.* 8*d.*

The following were published under the direction of the Medical Research Committee:

Milk and its Hygienic Relations. By Janet E. Lane-Claypon. Price 9*s.* net. [Longmans, Green & Co.]

The Amoebae living in Man. By Clifford Dobell. Price 7*s.* 6*d.* net. [Bale, Sons & Danielsson, Ltd.]

The Intestinal Protozoa of Man. By Clifford Dobell and F. W. O'Connor. Price 15*s.* net. [Bale, Sons & Danielsson, Ltd.]

*In addition to the publications contained in the list given above, numerous memoirs upon work aided by the Medical Research Council have appeared in Scientific Journals.*

LONDON:
PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE.

To be purchased directly from H.M. STATIONERY OFFICE
at the following addresses :
ADASTRAL HOUSE, KINGSWAY, LONDON, W.C. 2;
28 ABINGDON STREET, LONDON, S.W. 1;
YORK STREET, MANCHESTER;
1 ST. ANDREW'S CRESCENT, CARDIFF,
or 120 GEORGE STREET, EDINBURGH;
or through any Bookseller.

1925.

*Price 2s. net.*